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## ADVANCED.COMPUTER.ENTERTAINMENT

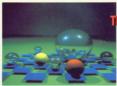
## SUPERB FREE DIARY!

Entries for every day in 1988 Programmers tables

## CHRISTMAS CRACKERS







## GAME OF An ACE investigation

## **KEYBOARD** CAVALCADE

Christmas keyboard round up

ELKA EH-105

PAGE

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## MASTERS OF THE UNIVERSE HAS COME TO LIFE!!

• Now you can live it, as the conflict between good and evil continues •



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# ACE

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Catch up on the latest conversions for your machine, including Super Sprint for the Amstrad, Leviathan on the Amiga, and PC Gunship.

High-flying

on Plexi Mario I more.

The Pilg Plunder and goes

Tit

Up to £4

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get left discour time.

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monti peop your

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Up to £4 discount on each of the games listed here. Chuck your stocking out of the window and grab a nillowcase instead

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At last! The definitive buyer's guide to the world of home computing. The games AND the machines to play them on, updated monthly by the people who know for the people who matter. So just sit back, and let your pinkles do the walking.

## elcome...

...to our biggest issue yet. We may only be four this month, but already some of the ACE staff feel as if they're in line for a telegram from the Queen.We thought we'd take a quick break to fill you in on what's going

First, there's the ACE Pink Pages. We've long felt there to be a real need for a proper consumer guide to the home micro industry...now there is. Whether you're after games or a new computer, these pages will point you in the right direction. This isn't just a one-off - the Pink Pages will be there every month, whenever you need them, and always bang up-to-date. What's more, from next month we'll be including peripherals as well.

Secondly, there's the ACE 1988 Diary. We thought it would be good to get something on the cover that lasted a little longer than your average free gift - we hope the 'lasting interest' on this one will take you through to Christmas 1988, which gets it a very respectable PIC curve, and an ACE Rating in the high nine hundreds.

Thirdly, even though this is our biggest and best issue yet, we're beavering away on a whole host of projects for the coming year. We're playing things close to our chests just now, but stand by for a series of innvoations that will not only give you a bigger and better magazine, but also one in which you, the readers, can become more closely involved.

Finally, we want to thank YOU for the best Christmas present we've ever had - the enormous response we've had from readers has proved to us beyond doubt that there IS a market for intelligent, insightful, and entertaining coverage of home computing. Stick with us - we won't let you down.

## The ACE Team

## ADVANCED COMPUTER ENTERTAINMENT

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Prestel/Micronet 045 874 011

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COVER PHOTOGRAPHY Stuart Baynes Photography, Bath, = 0225 65343 ● SUBSCRIPTIONS & SPECIAL OFFERS Carrie-Anne Porter. The Old Barn, Somerton, Somereta Tat1 7PY = 0458 74011 ● COLOUR ORIGINATION Wessex Reproduction, 3523 Wells Road, Brissol 854 00.0 ● DISTRIBUTION SM Distribution, 1618 Trinty Gardens, London SW9 RDX = 01-274 8611/5 . PRINTING Chase Web Offset, Plymouth . Copyright













## OBLITERATOR

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What awaits? What technological perils and strange diabolic adversaries will try to thwart you in your mission?

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## TERRORPODS

its been a long watch..... As the sidisappears over the horizon, the uninviting, grey bleakness of Collibocomes apparent. Following the intense heat of the day, the onset night adds the bitterness of sub-triple.

environment, and the stark interior the D.S.V. appears almost homes! Deep melancholy is suddenly smashed by the shrill scream of a siren. The status panel has gone

flash uncontrollably, Good what's happening? Frantically, you turn to lool command scanner, huntin the mass of information be

> Your whole being freezes ... bel The Terrorpods . . .

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fears, use every skill and evailable to you. Hideous perils await. Ca survive?

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I f it moves - license' it seems to have become a software adage in the past three years. In the coming months we'll be seeing an increase in the number of titles culled from the TV screen, after what is generally termed a "poor start" in this field. Remember Knight Rider? SuperGran? It's a Knockout?

Until recently, the field has been almost exclusively left to micro versions of (mainly American) cartoons, such as Thundercats, Centurions Gobots and Boad Bunner is concerned that the games should capture the atmosphere of the original - so much so that they've sent Blockbusters out to programming team ODE for a complete rewrite. Domark's Mark Strachan claims that the rewrite is to update rather than improve the original code and questions contained, but he does admit that Domark didn't take up an option to sell Macsen's EastEnders. because 'it was just so dreadful".

Domark plans to release four or five titles a year on the TV Games label the first of which will be The

# $\pm N$

## TELLY TIE-INS

The ones we'd like to see

If you can make a game out of Blockbusters then you must be able to make a game out of just about anything. Here are a few programmes we'd like to see become pro-

Breakfast Time - you'll need Amiga graphics to really get the benefit of Frank

Bough's pullovers The Epilogue - Bishop Rambo runs amok with his deadly crozier Wogan - can you out-talk Terry over a

year of gruelling shows? Floyd on Fish - fillet as many turbot as you can in the time limit: but make sure you keep your wine glass topped up!

Blue Peter - 'and here's a game I saved earlier' Coronation Street - Newton and Ridley are on strike; you, as Ena Sharples, race against the clock to find a bottle of milk stout.

A digitised Bob Holness is the gruesome prospect now facing

ing towards quiz programmes at the moment. Mark Strachan says that 'we'll look into any games that are popular at the time' and cited Blind Date and a new programme Strike It Lucky as shows whose computer potential had interested him. Piranha enjoyed some success

Krypton Factor with Every Second

Counts appearing in the New Year.

Although the company is lean-

with a micro version of the children's cartoon series Trap Door, and plans to release a second Trap Door game to coincide with the new TV

series next year. The humour in the show and the nature of the characters leant itself to the computer commented Piran-

ha's Helen Holland.





## Knightmare

mare has some added difficulties, however. Knightmare the TV show already uses computer graphics, but from two Spaceand suited to the job than your

Programming team Focus styles - you could play it more as an arcade bash, or treat it as a puzzle-solving arcade adven-

In the game, you will play has been replaced by 'good' and 'bad' oracles, whom you can consult for advice at any stage. The caution, the 'bad' will urge you to take a more physically perilous course of action - and neither is right the whole time.

The Knightmare TV series er, estimated figures show that of around 4 million per episode so the prospects of a second series must look rosy. Not to mention Knightmare - The

- arcades, comics, toys - and the TV origins are emphasised less in the micro conversions.

Saint and Greavsie - 'a game of two halves. But the lad done

The new batch is led by Domark, which has taken over the defunct Macsen range, including Blockbusters, Countdown, Bull's Eye and other quiz games.

Many of these have additional links

Domark has created a new

label, TV Games, for the titles and

well, di'n't he Saint?"



## **Code Masters Plus**

on in the package of two casset

nced tape, you The Plus range is due to be ed in early Dec

Jet Bike, by the C rum at £4.99

Also expected shortly from Code Masters are ST and Amig sions of Grand Prix S or. The price isn't yet





Flo and Andy face to face

## ANDY CAPP

vervone's favourite lavabout should be available on micro by mid-December. And who else would it be from but Mirrorsoft? Your aim is to survive a week in Andy's tough life; that means getting and staying drunk, scrounging money, cheating on your wife Flo', spending time in the betting shop and dodging the rent man. Development house Blitter Animation are keeping tight-lipped about how you actually play the game, but they will reveal that it contains a certain amount of 'cartoon-style' violence as well as multipleTalking computer logy is no loke if you're blind; even

type, you can't see the screen to check if ge all that; it speaks - and it's b

ilt-in word processing package. As lette nore, the Eureka can be connected to an IBM

ed by a Czech exile and built in Australia, is ed in the UK by Techno-Vision Systems. It should cost

## Super-tape kills CD?

ust when we were getting use to spinning a mere 500 megabytes around inside our state-of-the-art CD ROMS, the boffins come up with Digital Audio Tape - a little widget half the size of a normal music cassette that holds an awesome 1.2 gigabytes. Your little pocket calculator probably can't handle sums that big, but roughly speaking it's about 1258291200 bytes, the equivalent in memory terms of just under 75 million ZX81s (with the RAM pack). Since the search for a reliable

read-write CD ROM has been a difficult one, and the prices are around £3500 for a drive and £100-plus for the blank discs, you can see why DAT, just introduced in Japan at around £950 plus £10 for blank tapes, is a smidgin more attractive. True, these systems are for music use, but the technology carries over very easily into the computer arena.



music cassette, but holds 1.2 gigabytes (1258291200 bytes) and can access any file within 20 seconds

writing Sony have delayed the launch of their Digital Audio Tape unit in the face of mounting opposition from the music industry, who believe the system will be used for pirating music from compact disks. We don't recall this sort of problem stopping the introduction of music cassettes - would it be unfair to suggest that this is because DAT is a Japanese import and an area in which European firms lag far behind? In the meantime, the wrangle

over DAT in the music business is going to set back any plans to transfer the technology onto computers. Sanyo, Aiwa, and Hitachi are all waiting for the go-ahead to release their DAT music systems over here (already on sale in Japan), but until the fuss dies down their seems little likelihood of any real headway being made in either music or com-

### Head in a spin The system works by recording data

onto tape using the same method as that employed by video recorders. Instead of laying the information down in a long line along the length of the tape, the data is recorded on a helical scan basis, laving tracks across the tape using a rapidly rotating recording head. The digital format not only eliminates 'noise', but also offers frequency and dynamic ranges even higher than compact disc.

Hewlett-Packard currently have a co-development deal with Sony to produce a DAT unit and although this could end up costing around £3000, the idea is that volume sales in the music industry could lower the cost of production and these lower costs could then benefit the computer market. Also, let's not forget that a price tag of three grand is not out of character with Hewlett Packard, who are not renowned for their presence in the budget market. Get someone like Jack Tramiel on the job and things could really start spinning. Typical

applications would be storage of digitised pictures, as well as audio and

data information - just what we were going to use CD for, but perhaps never will.

Of course there's a bug in the lettuce. At the time of

## Infocom revolution

dropping their prices to £19.99 for most titles and £24.99 for the 'top-end releases'. Previous ice levels ranged between £24.99 and £34.99. The company are also promising some 'revolution

ary releases' in the New Year, but lips remain sealed for based games, since the company is known to have been impressed by the Magnetic Scrolls products and have recently included rudimentary graphics (on-screen mapping) in their latest game Beyond Zork (reviewed by the Pilgrim in this issue).

Bad news however for Amstrad owne Recent Infocom releases for the CPC range have been regularly delayed, and the whole question of Amstrad Infocom products is nder review. Will the company continue to support the 8-bit Amstrad machines? Probably not admits Activision's Clare Hirsch. Better start saving for something beefler, chaps...

But an 250 and £2 your micro nough per able to expli

## irain marries

hile Mastertronic were steadily increasing their interests in the computer entertainment field (see last month's Mastertronic Empire Building story) little did we know that Mastertronic themselves were being wooed - and won - by Richard Branson's Virgin.

The records/ computer games/satellite TV/publishing conglomerate paid millions for a 45% stake in the budget and arcades company. Virgin's Nick Alexander explained the move in terms of Mastertronic's expertise in fields where Virgin is inexperienced -

notably, budget software, arcade machines and the US distribution of

software The first fruits of the liaison for the UK software buyer are likely to be a budget version of Virgin's hit Dan Dare game; don't be too surprised if other Virgin titles find their way on to

Virgin's Way Forward Virgin are rather more deeply involved in the consumer exploitation

Mastertronic's list

of new technology than a look at Action Force or Rebel might suggest. Richard Branson now has interests in satellite TV, electronic publishing, traditional publishing, computer games, CD-ROM and interactive video.

In fact, so interested is the company in these fields that they've just appointed a general manager for their Interactive Video Division, William Beckett's first production for the company is an educational game based on Sir Ranulf Fiennes' Transglobe Expedition, which traversed both Arctic and Antarctic regions.

Dan Dare: first Virgin game to go Mastertronic

This educational 'game' will be available initially only for the BBC master. system - to take advantage of the equipment many schools have installed in



order to run the BBC's Domesday project (a latter-day' version of the Domesday book, with a plethora of maps and statistics, as well as 52,000 digitised pictures, on two Jasenvision disks).

Beckett describes the Transglobe program as a 'multiple role-playing adventure' whose educational value lies in the need for the players to plan, navigate and cope with meteorological and logistical factors. With 75 minutes playing time per side and up to 50,000 digitised piccys, it sounds well worth a

But are we likely to see anything like it for home consumption on other machines? Beckett thinks so - but probably not for a couple of years. Even then, because the technology is in its infancy, both the hardware and the software are likely to be pretty expensive: the disks could well cost between £50 and £200, while you would also need a laser disk player to interface to your micro. But new technology has a habit of falling rapidly in price if enough people want to buy it, and it may not be too long before you'll be able to explore the frozen wastes from the comfort of your own armchair.

## Snippets...

## Star Wars

£9.95 cs £12.95dk Amstrad £9.95 cs £14.95dk

Take control of your X-wing fighter in this conversion of a four year old coin-op. Blast the Empire's fighters before you penetrate the defenses of the Deathstar. You'll still need the Force with you if you want to hit that. elusive exhaust duct. Should be in

## the shops as you read this.



This one or two player arcade action game offers the player 99 challenging levels of mazes, monsters, magic and messages. Make it to level 100 and you'll find Calvrak the Demon ready for battle. Should be available in time for Christmas.

## Octopolis

£9.95 cs £12.95 dk Combining parallax scrolling shootem up with challenging platform encounters - plus monsters and evil eyes. This one or two player number should be on the streets for the start of the new year.

## Cosmic Causeway

£9.99 cs £14.99 dk This follow up to the highly success-

ful Trailblazer game features multidirectional scrolling and the chance for the player to buy some useful bonus which could get him out of a tight spot. Should be in the shops as you read this.

### Resolution Nexus

time for Christmas.

Bo Jangeborg's latest is definitley not another Fairlight. Resolution is a strategic, horizontally-scrolling shoot-em-up in which the player tries to save the world from a manic mining corporation determined to destroy all the Earth's natural resources. This environmentally sound game should be available in

This abstract shape manipulation game, played in real time, should be headed our way at the start of the new year.

The licensed conversion of Oliver Stone's blockbusting film of American Army life during the Vietnam War should be hitting the streets, deck, dirt or whatever in the new vear

Pete Cooke's follow-up to Micronauf 1 is a horizontally-scrolling shoot-em-up viewed in three dimensions. The game allows the player to move his craft from the foreground to the background of the screen. Set on the moon, Earthlight should be out in time for Christmas.

## T-Punner

price undecided Set on a Marines training platform in

space, this arcade adventure gives the player a Marble Madness-type view of the game area. After 300 years of lying idle, the central computer has gone haywire - and it's up to you to sort it out. Should be ready for Christmas.

## Rastan Saga

Spectrum £7.95 cs £14.95 dk

Hot from the arcades, Rastan Saga puts the player in control of the muscle-bound, long haired, swordwielding hero of the arcade machine. Look out for it leaping onto the software shelves at Christmas



## **MEN ONLY?**

because she sees it as a a cynical

and patronising marketing device to

exploit women consumers. Not that Ms Sinclair sees herself as a feminist: 'I cannot stand or tolerate feminism of any form", she says. Anita Sinclair doesn't have

much time for arcade games; neither does ACE adventure columnist Pat Winstanley. She thinks women

prefer adventures because they

'demand thought' and they're some-

thing you can stop and start with

games is Hanan Samara, who runs

development house Dalali (respon-

sible for such recent games as

Mean Streak and Yogi Bear). Even

she, though, doesn't really gop on for playing arcade games; 1 prefer

the design more than anything

else'.\ Although there are plenty of

women programmers around, most

of them tend to work in the field of

For the time being, at least, the

business software.

boys are running the game.

One of the few women making a living from developing arcade

## Why the girls aren't joining in the fun



in any form'

he nation reeled in amazement on Wed 11th November when it was revealed that Debby - in the Brookside spin-off Damon and Debby - was writing a computer game. Coming soon to an Amstrad on the telly could be Debby's True Romance, a Mills and Boon-ish game - aimed at girls.

Is it just a coincidence that Infocom's own game for girls, Plundered Hearts (see Pilgrim this month) is coming out right now? And does all this feminine activity mean that women are becoming more involved in the playing and the production of computer games?

Certainly, there's a lot of female participation in the adventure game world. Magnetic Scrolls, with The Pawn. Guild of Thieves and now Jinxter, have shot to prominence in the past couple of years; and the brains behind Scrolls is 25-year-old Anita Sinclair. She reckons that women comprise about 25% of the Magnetic Scrolls audience, and further suggests that women make 'better adventurers than men.' As for herself, she admits to having written a couple of arcade games. but will not reveal their names.

Does she feel that her sex has hampered her career in the games biz? Not a jot - in fact. Tve had more doors opened for me because I'm a woman", she says. Anita has a pretty low opinion of Plundered Hearts, calling it 'one of the worst games ever written', largely



arcade games programmer

## Games for airls

ilous task in the African jungle.

## Telecomsoft comp - the winners

your machine for a year – has at last been won. We reckon that entries ran to well over So, without further ado, here are the four winners: Amiga owner R. MILES of

of Glasgow, 64 owner KEVIN STEWART of

All four of them can look forward to a feast of software over the next 12 months.



awful lot of under 18s around who

could play it - if they wanted to: but,

of course, once they see the certifi-

cate nobody under 18 is going to try

## 'Orrible murders

RL have cooked themselves up a nice little publicity-spinning controversy with their Jack the Ripper game (written by those eccentric ladies of St. Bride's). The recipe's pretty simple: get yourself a gory game, go along to the British Board of Film Certification and ask them to certify it, then make a lot of noise because they say it should be for the over-18s.

CRL are no stranger to this tactic; they took previous releases Dracula and Frankenstein along to the film censors as well, and duly oot their certificates (and publicity). Their new game breaks new ground - or plumbs new depths, depending ics depiction of scenes of revolting violence: the screenshot that came through with their press release showed a disembowelled naked woman, with mutilated breasts, spilling blood all over the place.

saving as much is more than likely

to have quite the opposite effect.

And producing it on the C64 and

Spectrum means that there are an

There's no doubt, of course, that the game shouldn't been seen by under 18s. But placing a sticker on the package

to buy the game, are they? And, of course, no shopkeeper is going to sell it to anyone under 18. The authors of the program those ladies of St. Bride's - disclaim all responsibility for the graphics:

their input, they say, was confined to the text. Not that St. Bride's Priscilla Langridge is taking accusations of bad taste lying down; she defends the game as being an attempt to 'recreate the atmosphere of the times' and as portraying the 'struggle between good and evil" - as opposed to the 'moral anarchy' of the arcade games. The St. Bride's slant on the well-worn tale comes courtesy of 'a clainvoyant friend'; the theory runs that the murders were the work of a diabolical sect engaged in ritual

sacrifice. At ACE we haven't yet been able to pass definitive judgement on the game - neither copy we had received at the time of writing wanted to load - but The Pilgrim will speak in our next issue.

10 Advanced Computer Entertainment



# **FASTEN SEAT BEL**



## Vampire's Empire Magicbytes

It's that ob-so-new Ariolasoft label again, with a Made in Germany platform epic for C64. Spectrum, Amstrad, ST and Amiga. If the gloomy atmospherics of these screens are anything to go by, the game's graphics should match its Draculanian theme very nicely. Vampire's Empire is due out in January, so start sharpening your stakes right

...and prepare for take-off! These little babies are queuing up on the runway right now, and should be reaching for the skies from a shop near you in the next couple of months. Check out next month's ACE for the definitive reviews



(ST) Big trouble in little Transylvania: I wish I'd brought that garlic now!



(ST) The computer issues a summons: I think it means you!

## Paranoia Magichytes

Yet more from those prolific Germans, courtesy of the equally prolific Ariolasoft. This time the setting's an oppressive future world from which you must secretly plan your escape.

Deceiving the states a risky proposition, so mind the central computer doesn't catch you at it! The game's due out for all major micros some time in January.



(ST) The 64,000 volt question: get the answer wrong and you really won't like the consolation orize.

## Out Run

This incredibly long-awaited coin-up conversion that the steets on CO-8 Spectrum. Arristhad and ST very soon, and its still not clear how the home micro versions will imeasure up to the originals very high standards. The nearest thing we've seen to a fraished product so far is a CO-8 version with a very naine feel for speed and

gradient dong with some impressive trackside features point bees, speciators and the little - but still no gameplary. The production version il have a tape of the original accade music, so Chesing Breese taris won't lose out even on the Spectrum. But will mechanical violence famile be satisfied by the high-speed crashes? Wat and soe.



(CS4) Overtaking a Beetle (or is it a Fiat?) on the rock-lined highway of Stage Three

## Grand Prix 500cc

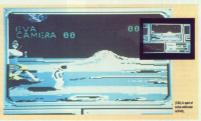
Yet more racing action on the way, this time from across the channel. Tear round the world's Grand Ptix circuits on your half-litre bike, striving to outdo computer opponents or a fellow human being



on, your ST or PC. (ST) Burning rubber at Silverstone

## Apollo 18 – Mission to the Moon Electronic Arts

US computer game patriotism may lead to some petity gardesque re-enactments-bombing Lighty again, to crying out loud - but this Accolated the proves that it can also produce some commendatie ones too. The commendatie ones too. The makes a policy of the commendatie ones too. The makes a continuation out of the commendation of the commendatio



rights Dinamic turn their me Over of course, but ere are certainly signs of the also due out from Ocean early in the New Year.)

## Masters of the Universe Gremlin

Based on the forthcoming Dolph Lundgren film, this new tie-in follows cartoon character and sometime plastic toy He-Man as he and his companion Teela battle the forces of the arch nasty Skeletor in (of all places) modern day California. If you've got a Spectrum. C64 or Amstrad you can defend the universe from evil later this month.

(DS4) He-Man battles it out with the forces of evil in a dark alley . Y

that

run c now

Oce

## **Test Drive** Flectronic Arts

Driving games are all the rage right now, but Accolade have come up with a new angle on the genre with this one. Due out from EA this month on C64. PC and Amiga, Test Drive lets you try out some of the world's flashest high-performance cars - Ferraris, Lamborghinis and Porsches all make appearances - over timed road courses. The title aims to give you the feel of the different cars' handling characteristics. but don't spend too long assessing high speed performance or the Highway Patrol will collar you!







## The Hunt for **Red October** Argus Press The game of Tom Clancy's

book - a kind of underwater Firefox - this one sets you the task of steering the Soviet submarine Red October to US waters so that its officers can detect. The sub's secret lownoise engines would make this a piece of cake, but the Soviet fleet have already been tipped off so time is short. Due out this month, the game'll be available for Amiga, ST and



PC. (ST) The Atlantic Ocean on the main screen, with soner options on the right.

little difficult to see against that background

## **Tonic Tile** The Edge

Just can't get enough of those Breakout clones? Played Arkanoid and Impact to death and still want more? Then take a look at this French bath ball effort due out on the ST any day now. There'll be a full review in next month's issue, but this screenshot should give you the measure of the game graphically speaking



LOOTING, GAMBLING AND SMUGGLING



REPORTS filtering through from Hong Kong suggest that the might of TAI-PAN is threatened as a pretender to his title is now becoming stronger every day after a speight of pirate attacks on innocent merchant ships and an uncanny run of good fortune in the gambling dens. Although runnours now suggest that his own empire may well be in jeapardy as mutiny strikes throughout his fleet.

## COLOUR VANISHES



THE evil Zark strikes again to leave our world void of all its glorious colour.

Our only hope now is for the magical powers of Wiz and his fantastic feline friend, Catelite to perform their wonderous deeds indeed, Zzap has already been quoted as stating "the finest release this year".

## I USED TO BE A FLY IN THE OINTMENT



TRUE story by intelligent man.

A new experience, just released by Denton Designs, takes 'growing-up' to further dimensions. Have you ever wondered how you got here, which

track you took, where you're going? Well Eco is the game for you. The graphics and animation are a sensation and the game-play is just out of this world – a game for life!

## CHRISTMAS SPECIAL

# NE W

RELEASES NOW FOR THE

## ATARI



## MAVERICK SKIES

TOP Gun has gone through the roof! "Flying has never been so easy—the hard part is winning!" says Top Gun. On his latest assignment he just couldn't be stopped—flying supersonic and producing aerial manoeuvres that would fool a turbo-charged horse fly he later quipped—'It's simple, just enter the danger zone!"

You're cool, the engine's hot, the girl's gorgeous, a tank full of gas and an open road.... the rest is up to you...!







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## 



## THE START OF SOMETHING NEW















COMMODORE 64/128 ATARI XE/XI







I am a loyal reader of your sister magazine, Amstrad Action, and on a recent trip to the local newsagent I spotted a glossy new mag called ACE with a special on solid 3-D games (my favourite)

Ricking through the letters section I read the first letter, and thought 'Ah, so that's where Connor sneaked off to, nothing to do with the Foreign Legion after all. I have a suggestion: my bed-

room wall is plastered with artwork and posters from various computer magazines (not that I read them) and I know that a lot of my friends' walls are too. Why don't you publish a

photo/poster/pin-up of the ACE production team? We've never seen them, or are you too ashamed of your handiwork? What does Carrie-Anne look

### Dominic Lacey Great Eversden

The ACE production team are a shy, retiring bunch. They work for the quiet satisfaction of doing a good job, rather than fame and publicity. As for Carrie-Anne (our subscriptions suprema) she's a creature of rare beauty. Unfortunately, she too is a timid type and does not wish her photo to be print-

Commodore 128 Since you were unable to help R

Johal in his search for software for his new Commodore 128 and 1571 disk drive (November Letters), as one of the first C128D (the all-inone version) owners and an ICPUG member, I thought I might enlighten

Gameswise, there is very little specifically for the C128. I know of enhanced versions of The Last V8 (Mastertronic) - disk only at £4.99, and Rocky Horror Show (CRL) cassette at £9.99 (maybe disk as well) and it is of course, the only 8bit machine running the full range of Infocom Interactive Fiction - mostly in C64-Mode but the 'plus' titles (Mind Forever Voyaging, Trinity and Bureauocracy) can only run in 128 mode and only on 80-column moni-

There is a far larger selection of more serious software (word processors, databases, compilers, programming languages, etc) available in 128-mode versions, such as Superscript and Superhase (which can load together on a 128), Vigawritre, Petspeed and Oxford Pascal, all of which can regularly be found advertised by both publishers

and Commodore specialist retailers. In addition, any CPM+ software whose publisher can be persuaded to supply it on 51/4" disk in Commodore GCR or IBM. Kayoro

Osborne or Epson MFM formats can be read by the 1571 and run on the C128 - I understand that at least one ICPUG member has been able to obtain Locomotive Basic as used on the Amstrads in this way for about £50, and it should be possible to obtain other programs also.

If Mr Johal is musically inclined. Compute's Music System for the Commodore 128/64 (Compute) Books), an American book/disk package similar to Rainbird's Advanced Music System with 128 and 64 versions on opposite sides

Finally, if he joins the Independent Commodore Products User's Group (ICPUG) cooperative for £10 a year (plus £1 on joining for a share), he will have access to their free libraries of public domain software for C64 . C128 and CPM+. amongst others, covering both leisure and serious programs in all 3 modes, just by sending a blank disk or two plus return postge and packing to the appropriate librarian, and will receive 6 copies a year of their excellent magazine as well. Contact the Membership Secretary, Jack Cohon, at 30, Brancaster Road, Newbury Park, ILFORD, Essex 1G2 7EP, or ring, 01-597 1229 (days). 01-346-0050 (evenings)

## Alan Wiggins Oxford

That's a whole lot of useful information for C128 owners; I'm sure they'll be most grateful.

## In a cleft stick

I am going to get a new computer, a BBC or a ST. I'm thinking of getting a BBC as it's the same as the school's got and I am taking GSCE Computer Studies, I like the ST as it's got a huge memory and built-in disk drive. Can you please give me some advice?

## P Bourn Hurstpierpoint

Tricky one. A BBC Master is likely to be more expensive than an ST. with a lower spec. The BBC has loads of software available, but the ST is getting more interest at the tent and is likely to get more in the future. But there's that GCSE to consider; I think you need to ask yourself just how useful it would be to have the same computer at home as at school - don't most people taking computer studies do

## ACE LETTERS

Some spicy stuff in the mail-bag this month: boasting software pirates. accusations of anti-Amiga bias. accusations of anti-ST bias (can we be biased against both?), and letters from our oldest (71 years old) and voungest (5 years old) readers. Keep sending the goods to ACE LETTERS, 4 QUEEN STREET. BATH BA1 1EJ

quite nicely without having a computer at home as well? Not many people buy a microwave just because they're studying cookery.

## Where's Ultima? Compared to the dull drivel of so-

called rival magazines your mag is brilliant! I am amazed at your fantastic offers for the Atari ST - saving £12.44 for Gauntlef! But, you seem to have made an error in the Atari ST versions of Arkanoid. It costs £14.95 in the shops, not

When I saw your COLOUR reviews and your ingenious PIC, I was simply astounded. Your reviewing team have managed to do really in-depth reviews of games. I loved the huge 2-page review of Skulldiggery with a hint section! Brilliant! I immediately went out and bought it and I fully agreed with the 919 rating you gave it.

Keep up the good work and please continue to support the ST. Can you tell me when Ultima IV will be released for the ST. I've been waiting for it for months.

### Gavin Lim Chislehurst

We've already seen an IBM version of Ultima IV, so we reckon the ST version shouldn't be too far away: rest assured that we'll review it as soon as we can.

Sega is as Sega does
My beloved CPC 464 is keeping the garbage from getting lonely in the rubbish bin. Why? Because I have found a new love. Not another 8-bit. Not another 16-bit! Not even a computer! No, none of these. I've found the Sega Master System, I am totally obsessed by it. And if I don't see some real 'serious' reviewing of forthcoming Sega games I might have to get nasty, see. On a lighter note, I shall provide one question and one answer



Question - Is there a catalogue | | can purchase reviewing Sega games?

Answer - Turn on your Sega Console without cartridge or card in the machine and hold buttons one and two and the direction controller down. Something will happen?

Kurt Sega really is my name!

## Kurt Sega London

With a name like that I suppose you were destined to fall for the Sega. We all wish you both the greatest happiness for the future. If you write to Mastertronic they should be able to send you a catalogue of Sega products.

## XOR offer

Could you please tell me about your special offer on XOR. Does this include the "Icon Designer" and "XOR Designer" which I have read about in an advert for the game. If not how much would it cost to buy all the above from you? Would there be anything off the price of the "ICON" and "XOR" designers if they are a seperate package from the actual game which is exactly the type of game I've been looking for, and your review in issue one made me decide to purchase, and your discounts hopefully will persuade me to buy many games from you in the near future. If you could please answer my questions about "XOR" etc. Then I would be most grateful.

## Mr D Kyle Watford

The XOR Designer is a separate product, selling at £14.95 - but on the BBC only. It's not available through ACE.



Help! I bought a Spectrum +2 about 8 months ago and ever since then Ocean, Imagine, U.S. Gold games will not load except the odd one. Why is this? And is there anything I can do besides buying a new computer?

## Darren Moore Wigan

We haven't had any problems here with our +2 but we only got ours in

## Never heard such

I am not sure whether there's any point in my writing this letter about an article written in your third edition of ACE, as the article, about Aminas and Atari STs, was clearly written in a very deliberate and subtle manner.

My observation is that all the good points of the Amiga were highlighted on the first colour pages whereas the good points of the Atari ST were left until the bottom corner of the following black and white pages, which is obviously not so likely to be read by many

As for your feeble explanation about the Amiga's lack of software, again on the first page, I have never heard such rubbish in all my life. In America, the Amiga has had higher sales from the very start, mostly A1000 and A2000 models, and in that country it is regarded as a games machine. The Atari ST has never held such pretentions: it has been aimed at the games market from the start and even now Commodore don't seem bothered. I don't see why your magazine should do their job

Your comparison with the C64 software explosion simply does not hold water, as that comuter was a games

machine out and out. As for Germany and Scandinavia, their effect on software can be no more than minimal. I suspect you only threw those two in, in an effort to con us into believing that somehow this country is the odd man out rather that the only country with more sense than

As far as value for money is concerned, the Atari ST wins hands down. When you consider it costs less than £50 more than a C64 and disk drive, the value is simply amazing. When you ask the vital question as to July. There were some problems with older games, due to the slight differences between the old 48K Rasic and the +2's Basic. We supgest you try all the normal adjustments, such as checking the azimuth settings, and also - if you can - try out the games on another +2. If there seems to be something wrong with the software rather than your computer, then get in touch with the supplier of the game and

see if they can help or if they will exchange the games. how much extra one should pay for the extra hardware contained in

the Amiga, I would suggest the

answer is not £200, as at present.

A further £50 or even £100 might be acceptable, but again, when you consider the serious lack of software, what's the point of the argument at all. I have enjoyed the first two editions of your magazine, but not

so much the third. Atari deserve success with the ST machine and if you continue to run it down, I and I suspect many others will not buy any future issues. Be warned!!

### R J Lattimore Havant

Of course the article was written in a deliberate and subtle manner; we wouldn't want to have written something that was slapdash and moronic, would we? As for accusations that we're anti-ST, I think you're wide of the mark; both Amiga and ST were featured on the colour pages opening our investigation; we didn't make any attempt todisguise the price difference between the machines; we stated clearly, but without any favouritism, that the Amiga has a superior technical spec: we merely presented the issues, and left the readers to make their minds

### ST bias? I think that your mag is great, but -

and a big 'but' it is too - why are you doing most of the 16-bit work on the ATABI ST? I know it is a great machine, but come on, it's own an AMIGA 500, and a mean machine it is too. I think that it was well worth the extra cash and that it deserves more credit than it gets, what with its 4096 colours duce. I can guarantee the quality of the games it has to offer. The price for the ST is very good indeed and is well worth the money. But, if you want to get

## Who does he think he is?

I have several points to make so I have numbered them:

1) Who does R R Moranzani think he is? I refer to his letter in issue 2 of ACE. There is nothing wrong with the cover and it is much easier to see what great articles are inside than a piece of artwork for one game. Mr Moranzani also says that you need more colour inside ACE. 2) ACF has more colour reviews. screen shots and articles than most

something really special get an AMIGA. I can tell you it is wellworth the money! Not trying to slag off any computers, but I think the AMIGA just has the edge on the

## Steven Wright Brackley

We review as much Amiga games software as we can get our hands on, and the Amiga features nearly every month in the Graphics section. It doesn't feature so much in Music, largely because there's very little around in comparison to

## ■ Anti-Amiga mag? In your first issue you supply a free

cassette for Spectrum and C64 owners, but if you own an Amiga you get a piddly little £8 off some old games not even worth your discount prices. If Speccy and CBM owners think the free game is rubbish they can still use the tape as a blank. Me. I have to fork out £17.00 for a rubbish game/blank disk. Also Amiga reviews are thin

on the ground. Your graphics review said that the HAM mode of the Amiga is 'rather impractical' with 'very nasty restrictions'. I suggest your reviewer has a look at DigiPaint.

I look forward to Issue 3 with free software/blank disk for the Amiga (the ST and the Amstrad are also getting a raw deal).

## G. Pracy Attleborough, Norfolk We are not 'anti' any computers. I

reckon the offers to Amiga owners (and others) were pretty attrative. We review as much new Amiga software as we can get our hands on. We could possibly give away Amiga games on the cover - but would you be happy paying £4.00 for the magazine? I trust you find the gift on this Christmas issue compatible with your other computer magazines available. Also comments like "what wuz dat ed?" are not in the least bit funny and only make the magazine look immature and stupid. Plus the fact that ACE will not get extra readers by pinching ideas from other

The only thing I can agree with R R Moranzani over is the rating system which is a very interesting idea, especially PIC. 3) Do you know if there will be the

magazines.

3) Do you know if there will be the Commodore Show in Manchester and if so when? Last year's show was a bit of a disappointment as none of the software houses support the north.

Thank to Pat for a great G.A.C. column. Being a Commodore G.A.C. owner I find it very interest-

5) The competitions are great and I think that the prizes are very good and I hope to see more of them.
6) Finally, a word about the reviews. They are very informative and I especially like how you put labels on the soreen shots. sometimes

you cannot always tell the goodles from the baddles (to put it bluntly).

Thanks for a refreshing change to the normal computer magazines which seem to spend most of the pages slagging each other off.

## Mitch Pomfret Bramhall

Poor old Moranzan's taken a bit of a beating on these pages lately; let's make this the last letter taking him to task. At them moment we don't know of any Commodore Show clanned for Manchaster.

## Happy Amstradian I am whing as a delighted Amstrad

I am wifting as a delighted Amstrad owning reader, having taken full advantage of the first two issues' special offers and saving over £15 on two excellent new disk games. Those savings would have been much better to me than one (old) free game and a demo that would hardly last five minutes.

The magazine is superb; far more mature, more stylish, more colourful and with better features, reviews, and special offers than any of the rest, issue 3 being the best yet. As soon as I can afford it, I will certainly subscribe and save even more money.

## Tim Hix Tavistock

It's nice to ge a letter from an Amstrad owner who's realised just how marvellous our special offers are – and just how marvellous the magazine is.

## Gamesy-warnesy plea I own a BBC Micro B and was doing

value a volume to the consideration of the consider

### Paul McKay North Cheam

Superior and Audiogenic still seem to be committed to BBC 'gamesy-wamesys' (as you revoltingly put it). But we can't think of many other people producing the stuff.

## ■ Not running the

I own a Commodore 64, complete with disk drive, and printer. Annual January this year, I purchased Gauntier on disk for the altonementoned 64. During play, the game repeatedly crashed at random points, making it trailly unphayable. I returned the disk to the stop I bought it from and was given a replacement. This replacement may be also the same thing as guest a replacement. This replacement only did waschly the same thing as guest yet again, theret to U.S. Gold and to this day I haven't received a reply.

Recently, a friend gave me a copy of the game which worked perfectly on his machine, yet crashed just like the rest, on my machine. I sent this copy to someone else, who said it worked fine for him, which leads me to the point of this

My 64 is quite old, indeed it was purchased shortly after Commodore first released the machine, and this I asume means that there must be some difference between it and later versions which hitherto have not become apparent.

All other software I have works perfectly, but I wonder if the situation might occur with future releases, and if there are any other ancient Commodore owners who have had any similar problems.

Being a student, I can ill afford to spend lots of money on software, particularly if I have no idea if it's going to work on my machine, something which I am now going to have to consider.

I will be writing to U.S. Gold again, but would ask you to print this letter and do you think there is any chance of getting some recompense for spending nearly £15 on a game that doesn't work on my machine?

## Howard Crowe Harpenden

We don't know of any specific hardware changes Commodore have made that would result in your disk not loading - but that isn't to say that there haven't been changes. We assume that you've taken every precaution you can, such as unplugging all unnecessary peripherals. US Gold themselves should be able to supply some suggestions, if not explanations, and we reckon that in the last resort they ought to refund your money or offer you an alternative game

## Is this a record? I got 137,470 points on your Bubble-Bobble demo tape. Is this a record for my age? It was on a Spectrum +2.

William Barford, age 5 years. Northampton and his mum who wrote the letter and saw the score

Yes, it probably is a record. Any under-5s out there who'd care to challenge?

### Wise guy In the "Winner or Wimp" feature Skulkdiggery problem (page 42) there is a solution, surely? You may get killed but if you get the top diamond first then dash for the bottom

get killed but if you get the top diamond first then dash for the bottom mond first then dash for the bottom one, I think you will get it just before you get crushed. But the problem was just about getting the diamonds, wash it? Do I get a special prize for being clever (Skulldigger) for my ST2). No, I didn't think so.

## David Hood Glasgow

Any more letters like this, chummy and you'll be in real trouble. We've got your address on file.

### Paperboy problem Thanks for a brilliant and exciting magazine. But there is one question

magazine. But there is one question I want to ask you. In Issue 2 – Tricks 'n' Tactics section I typed in the Paperboy program. I then checked it and then saved it, I then ran it as you said and loaded the game Paperboy but it did not give me unlimited lives. I checked and checked it but it still did not work, could you tell me why? Oh, and by the way. I've oot a Commodore 64.

### Lee Howard Wheathampstead

The poke worked OK on our 64 in the office; we can only imagine that either there's something wrong with your machine or that there's something different about your copy of the program that means the poke doesn't work.

## Mail order misery I was wondering if you could give me some advice on my rights as a consumer. As a result of your first

issue I applied to a software house for some goods. Since then I have written to them four times and only received two out of four of the items which I applied for.

Both of the other two items have been readily available since I applied, and the software house have not written back.

### Stephen Strain Shrivenham, Swindon

First of all, write to the company concerned and tell them you are going to take the matter further. If you still do not receive satisfaction, get in touch with your local authority's Trading Standards Officer, or

## Cad of the month



I don't believe the price of ST software - £25 a piece! That's four for £100! And I bought my car for that price. PLUS, I get a lot more mileage out of my trusty Triumph than Starglider, Goldrunner or even Supercycle.

Luckily I found a person who gives me a copy of any ST title for the price of a blank disk.

Thank God for software pira-

### A. 'Doley' West Midlands

You seem rather proud of your piratical exploits, but have you stopped to consider that the more people who behave as you do the longer ST software prices will remain as high as they are and the longer software houses will have an argument for keeping them high? Piracy on this scale is tantamount to stealing not just from the company, but from other, honest consumers. You should be ashamed of your-

## I wish to tell a tale of naughty

deed that I happened to witness only two days ago.

I work in "" city centre and during my lunch breaks and I like to go out and look around the shops. On this day in question I decided to go into \*\*\*\* to see what demos they were running on their A500s and A2000s, and on their Archimedes. On the Archimedes a demo was running showing its version of the Amiga's Hold and Modify. The Amiga 2000 was running a short demo for thicko businessmen explaining the advantages of multi-tasking. The Amiga 500 on the other

hand was being used by a member of staff for rather personal purposes. He was using an item of software called Marauder to apparently - copy a disk. I have no idea which item of software he was copying, and I have no idea of whether it was for his personal use or for use in the shop, but it smacks of pure hypocrisy when

industry and the computer magazines attack home and business users on the matter of piracy, while people in a position of trust and responsibility treat the products that they sell as theirs for the I am not moralising on

whether or not piracy is acceptable as I transfer games from tape to disk on my C64 and I also receive copies from friends, but I would like to draw attention to an area which is avoided as mouh as possible by many magazines. So often home users have been attacked by the editorial staff of certain magazines that one can get the impression that the sun must shine through their anal orifices. I would just love to see some of them in the sort of pickle that some of the American TV evangelists are finding themselves in. I hope you don't take the editorial standpoint of being morally superior as it would ruin a lot of good debates in your letters

To round off I would like you to answer truthfully the following

1. Have you ever copied an item of software for any reason? 2. Do you know anyone who has copied software for any reason? 3. If you are impressed by an item of software you receive for review and at the end of the day two members of staff desire to take it home to play, do you copy it for the second person? 4. What do you believe is responsible for software piracy?

5. Do you believe there is a remedy to reduce or stop piracy? I hope you answer this letter in a fairly sensible manner. Please don't write half a page of bull slag-

ging me off. Stephen Sheridan Kings Norton

Answers:

1. Yes

2. Yes 3. No.

4. A combination of poverty, high prices and dishonesty 5. More maney for everyone, lower prices, more honesty

ask the local Citizens Advice

Bureau to help In the last resort, of course, you may have to go to the police but usually these things are settled

## before that stage # Adults only? The enclosed an Amiga disk of

some of unusual digitised material put that in your magazine if you dare or are you just aiming at kids? I have plenty more material, a good understanding of the art side of the Amiga and all the art packages available if you need review-

## Mark Hodeman Gainsborough

No, we're not 'just aiming at kids' that's why we're not printing your

## ■ Controversy of last

Sorry about my letter you printed! It was a little unclear. I believe strongly against the abuse of women! But enough of that! I thought I might take up your point of excessive violence in the computer gaming world. I think that

Ocean, U.S. Gold etc have simply found the soft spot in a gamer's heart However, many of us claim that we are pacifists; the fact is we all like nothing better than a good episode of the A-Team or a really

gory Stephen King masterpiece. As for computer games, Rygar is a fine example of a promotion ad for a game. In the arcade, I bet you don't think of it as carving a wedge in some poor soul's chest. No! It is merely a bashing of meanies to gain points. Similarly, I don't think that violence is really taken that seriously in computer entertainment. Take Commando, Green Beret, Who Dares Wins and the huge amount of clones all based around the unnerving butchery of a Vietnam army, nobody cares as long as the game plays well. There is a little devilish part of us that gets released whilst playing though, I can remember me smirking with glee when I punched a club wielder in Renegade off the end of the subway! Ha!

Demetri Panavi Harrow

## ■ Failed exp I was delighted when your maga-

zine appeared on the news stands but, alas, I have again been lulled in to subscribing to something which

does not come up to my expecta-

Believing that with the staff who produced Personal Computer Games this was a rebirth to cover the disappearance of Computer Gamer, which was my favourite mag, I readily sent off my sub.

As a pensioner of 71 years I used to enjoy typing the listings in the now defunct publications. Not all of us are computer boffins and there was always a lot of pleasure in getting the listings correctly on to tape and watching the results, even though I admit that these were not up to the standards of commercially

produced games.

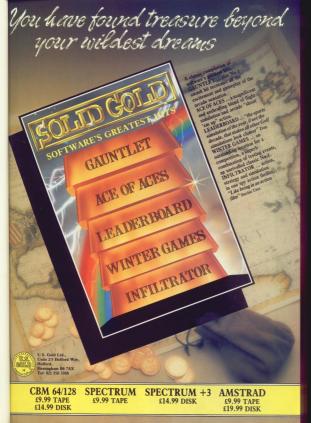
Unfortunately I see from your reply to John Hammond (Issue 2) and Don Griffin (Issue 3) that you hold the supercitious view of the expert that the interests of the novice are not worth catering for. Even an occasional listing would be welcome, but if this is not forthcoming I shall be glad when my sub expires and I shall no longer have to bother trying to find something in your mag which is of real interest to me.

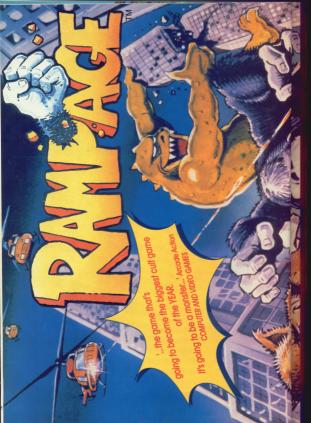
### C Gannan Redcar

I'm sorry that you don't like the magazine, but I'm unrepentant about our decision not to run listings; in this age of ever more sophisticated software it seems to use that there is just no point at all in spending hours typing in a Basic program - and even less point in devoting valuable space to them in the magazine. It's not as if we promised to print listings and then changed our minds; we said from the very beginning that we wouldn't have them, and that desision is not going to change. As for 'the supercilious view of the expert' etc., I think you're barking up the wrong tree; although some of the articles in ACE are written by bottinish people, we always bear in mind that our readers are a mixed bunch

spanning a wide range of experi-

ence and knowledge.



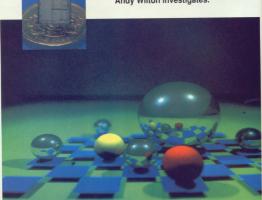




## GAME OF THE FUTURE

## Vision of the future

Check out the stanning graphics on this Transputant ray-tracing demo. Ray tracing's need for thousands of separate calculations suits the divide-and-conquer approach of Immos' parallel processing chip. How long before we see this kind of thing in all time? (Inset) The T414, the chip that makes it all possible, with a pount coin for scale. It's Xmas 1992, and you're loading up the brand new game some kind soul's just given you. But what kind of game will it be? What sort of machine will you be loading it on? Andy Wilton investigates.



new generation of micros is already on the horizon: power micros, fast enough to run whole new types of game. Micros using the technology on these pages are still a long way away from the high street shops, but in five years' time you could be playing games on them. They'll be able to spread the work of running a game between many separate processors: they'll be able to display half a million of colours on screen at once; they'll be able to read vast games from compact discs. But will programmers be making use of all that power? Will noisy phone lines thwart dial-in arcade games? And could this mean the end of sprites as we know them?

## Anything could happen...

in the next five years. Five years ago the Spectrum was brand new, and showed every sign of wiping out the year-old Commodore VIC 20 - a rather lightweight prequirsor of the C64 with only 3K of memory as standard. At £125 for the 16K model and only £175 for one with a massive 48K the Spectrum was the ST of its age: it delivered more bangs per buck, and guite a lot more

On the horizon at the time was the Acom Electron, a cut-down BBC micro that promised to be graphically superior to the



Spectrum. It was, as it turned out, but its high price, low power and late arrival were to

The ballooning of memory sizes and the collapse in micro pricing broke games out of their coin-op cloned stagnation, making whole new game types possible. Software

### 8-bit machines need not apply Jonathan Griffitho's innominate tank workers name uses the 'natrhwork'

landscape routines of Zarch to bring you blitckrieg on the Archimedes. The power required to handle the display in this case may even be beyond the capacity of the ST. A good example of how incre machine power can make new game-styles possible

houses mushroomed, and the games scene we know today started to take shape.

## The use and abuse of power

If the power of the ST's 68000 or the Amiga's blitter are revolutionising games this Xmas, we can expect even better things of home micros around (say) Xmas 1990. Already with games like 3D Galax and Carrier Command the 68000 is producing unbelievable solid 3D graphics at high speed, and it's still early days yet. With the far greater power around the corner, what other game techniques might

## Ray Tracing

At present confined to still pictures and short animated sequences on the ST and Amiga, this slow painstaking process involves following rays of light back from the objects in a scene to the imaginary source of light illuminating them. Ray-tracing a scene involves an enormous amount of work, and existing ray-traced animations are no more than 'slide shows' displaying previously calculated frames. The classic Amiga Juggler demo took over an hour per frame in calculation time, and even Tim Moore's high speed ST ray-tracing system took 12 minutes to produce the frame shown here.

Ray-tracing can produce frames of immense complexity and realism, depicting shadows, mirrored surfaces and transparent objects with breathtaking accuracy. Because the technique's so slow it'll be a long time before a home micro can use it at anything like arcade game speed, but compromise methods should be able to offer many of ray-tracing's advantages in the forseeable future. As Pete Cooke proved with his smash hit game Tau Ceti, clever lighting techniques

Otherwise, the real thing could still prove practicable and spacesaving for graphic adventures, as well as static-ish games in the Sen-

can add a great deal to game realism without slowing things down too

tinel or Driller mould.

### Fractals

They may seem like yesterday's hot piece of games technology, but with more powerful home micros on the way fractals could go far beyond anything that Rescue on Fractalus or The Eidolon had to offer. The power of these exotic mathematical oddities to give surfaces a natural, realistic texture has long attracted programmers to them but there's an enormous burden of number-crunching involved. As a result most existing home micros lack the power to handle fractals effectively at arcade speed, and since the Lucasfilm efforts there's been a con-

spicuous lack of interest in them for games purposes Fractals deserve a good deal more attention than this, now that high-power micros are on the way in. They can texture anything from snowflakes to mountains, offering fascinating possibilities for shootem-up landscapes and similar; imagine Zarch with realistic hills and crags!

## Parallel processing

Micro power is about processor speed and memory speed. There's a limit to the rate you. can get a conventional one-processor micro to run at. Technical advances may have brought us newer, faster processors and memory chips but the boffins can't keep this up indefinitely. Beyond a certain point, the only way to get a computing job done faster - whether it's moving a sprite, filling a shape or creating a sound waveform - is to spread the effort between two or more processors.

This sharing of the workload is technically known as parallel processing, and it's already a well-established principle in the lofty realms of supercomputing. The multi-ton monsters of the world's research establishments can tackle vast number-crunchina



ST ray-tracing demo by Tim Moore

problems by putting thousands of processors to work on them simultaneously

Even if you don't have £10 million for one of Seymour Cray's little beauties, you can still get on the bandwagon. For starters, the (comparatively) humble Amiga has a limited parallel processing capability: with 1 megabyte or more of memory, you can get its 68000 central processor doing one job while its blitter - effectively a graphics processor in its own right - gets on with another. By this time next year however, ST owners will be able to do a sight better than that.

## ABAQ

Due for launch in the first half of 1988, the forthcoming Atari/Perihelion ABAQ workstation will offer major-league parallel processing power that plugs straight in the back of your ST. The project's based around the T800 Transputer, a chip that has (along with its little brother the T414) been quietly taking the computer world by storm over the last two years or so.

Like Acom's ARM - the powerhouse of their Archimedes micro - the T800 is a British design, hailing from West country chip magnates Inmos. Also like the ARM, it's a 32-bit chip. Indeed, you could be forgiven for thinking that the idea of plugging a T800 into an ST is very like Acom's plug-in second processors for the BBC micro, in a sense a very early example of parallel processing on a home micro: but there are some big differ-

For a start, the T800 add-on won't just get

## Speed vs. screen size

Machine power is on the increase the whole time, but so is screen size. 'Size' here means the amount of room the screen takes up in memory, and that's a very important factor in games performance.

Computer art packages and machine sales brochures describe the screen in terms of the resolution (320x200 or whatever) and the number of colours available simultaneously. Both of these have been rising continuously over the last five years, and the rises have pushed up the amount of screen memory required. For example, the Amstrad CPC needs 16K for a screen of 160 dots x 200 lines in 16 colours, while a 32-colour 320x200 Amiga screen takes up a hefty 40K of RAM

In broad terms the more memory a screen takes up, the more power you need to run the same game on it. That's why Amstrad games typically run slower than their Spectrum counterparts: the machines are just about equal on power, but the Amstrad's screen is at least twice as big. With ever larger game screens - the 256-colour 320x256 Archimedes effort used on Zarch takes up 80K, probably the biggest yet - micro power has to carry on

rising just to keep games running at current This vicious circle isn't nearly as bad as it sounds. Micro power is rising a good deal faster than screen size at the moment, with the Amiga

sprites the size of the entire screen in typical games display modes. Quick game of Space Harrer, anyone? your ST thinking faster: it'll give you vastly better graphics from it's own onboard video chips, and manipulate these at incredible speeds. In truth it isn't really an add-on for the ST at all, but a high performance com-

puter that relies on the ST only for keyboard The second big difference is down to the T800 itself. From the outset the Transputer family were designed as parallel processing chips, making them quite unlike anything



Like the Transputer, Acorn's ARM chip is flying the flag for Britain have in 196 release

else around. Each one of them is almost an entire computer on one chip, complete with 2K or 4K of RAM already built in. Linking them together is childsplay: Inmos have built a multi-player combat helicopter simulator that lets four or more armchair pilots fly

## **Dynamic Universes**

input and disk storage.

See how software for the machine of the moment five years ago (the Sinclair Spectrum) has matured in the quest for the dynamic universe - a real world encapsulated in your micro. And if this is what we can get out of an eight-bit machine, what will the next five years squeeze out of STs and Amigas?



What you see is.. what you get in Haunted Hedges: The closest this early Sprum game gets to realism is that 30 effect on the walls. You



4 Isometric exercises nevo's World: Gargoyle enlarge on the 3D room-by-room style 85c Atac's successor. Knight Lore. The same bits-and-pieces ch as before, but it's looking much better.



Going places... Android Two: Costs Paneyl of Vortex was ahead of his time with this one. 30 landscaping has improved, and now you can scroll in



New perspective De-activators: Ariolasoft go for true 3D perspective here, with droids appearing larger as they get nearer the camers. It's still



3 The jig-saw approach ate take the opposite approach - there's no scrolling here, but they've packed a whole mappable mansion



6 A world is born er: The Freescape system from incentive brings a planel to life. Whether they can squeeze any more blood out of the Specum stone is anybody's quess



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around the same solid 3D landscape, firing at each other if they wish, and uses 11 Trans puters per player. It only took two manthere was no need to get clever with that

The biggest drawback of Transputer technology at the moment is the price. Where Acom's add-ons have mostly been within reach of the home enthusiast, the Atari/Perihelion box plus software will probably be around the £3000 mark. Put that have to be a pricey Mega ST at that) and you've got a bill that makes the Archimedes look very cheap.

The Atari/Perihelion Transputer box will be an impressive beast. It'll have a 20MHz T800. a 20MHz 32-bit Blitter for graphics operations (should be around ten times the speed - its own picture output. Throw your old monitor in the bin folks, because this one will be able to turn out a 1024x768 screen in 256 colours, or a 512x480 one in around half a million of them.

The box is intended as a workstation so that kind of graphic output isn't actually way over the top. Whether a future T800 micro would have graphics on the same between them, the T800 and the Blitter can handle a screen that size. With 'titchy' screens like the ones an Amiga or Archie uses, the dynamic duo could surely perform

The question is, are Atari planning a Transputer-based home micro in the forseeable future? Opinions differ: many see ABAQ as the start of just such a project, with a finyears time. Sceptics like Starglider author Jez themselves even after a recent price cut T414s still cost £180 each - and the fast RAM they need, but the optimists won't be discouraged. Transputer prices would turnble with the mass production on Atari machine would need, they argue, and chip

## In practice

games programmers aren't using it, of course. Amiga and ST programmers aren't games still partially written in high-level lanerably slower than they need to be - the sluggishness of so many ST and Amiga to a high C content - but it has its advantages as far as the programmer and the software house are concerned.

For programmers, languages like C can make life a good deal easier, and cut down writing time. For software houses it makes their games more portable, cutting down on the time needed to convert from one

To an extent this is just a phase the 16-bit market's going through. Early Spectrum in adverts of the time, where nowadays it's taken for granted on all 8-bit machines. The 16-bit C-monsters can't match the speed of the machine code opposition so they're starting to die out, but such games may well find a safer niche on high-power micros.

mous increase in speed they offer, power micros will let a programmer get away with using C. As Zarch author David Braben pointed out. On the Archimedes you could even write a marketable game in Basic. It's going to take a lot longer before high-level languages are dropped on ARM or Transputer

Transputers present machine code pronetworks of Transputers can be very tough going indeed at such a low level. Inmos themselves strongly recommend the use of the parallel processing language Occam instead, and the signs are that most programmers will toe the line on that one. The chip's designed to be programmed in Occam, Arcadia programmer Andy Walker said. It'd be worth the slight loss of speed to net proper parallel processing."

## Sprite send-off?

Not only will programming techniques have sentation of the games you play. With machine power and screen size on the way up conventional 'bit dump' (that is, spritebased) games start to look less attractive than at present. If your machine can handle a sprite larger than the entire screen (see Power and Screen Size) a game's going to have to do just that to actually impress anyone. The bit-dump games of today just won't thermore, if you're writing a game for a micro with a 1Meg screen you'll have a tough time conventional disk (A CD could manage it

though - see separate box.) On the other hand, the new chips will be able to handle the calculations and area-filling of realistic 3D games for better than ourrent machines can. Higher resolution displays will also suit 3D games very nicely. with fewer jagged eges and better definition on small objects. Given the prestige attachbeen launched as a budget game, for example - such techniques should also tetch

## CD capers

Two or three years ago, the future looked CDshaped. Laserdisc coin-ops like Mach III and Dragon's Lair heralded a new era of TV-quality graphics you could interact with. Well, that's

the way it looked, anyhow.

Compact discs are undoubtedly wonderful things and could have a lot to offer the gamesplayer of the future. Their enormous capacity for data - over 500Meg (that's 500,000K) on one disc - makes them naturals for home computer use. CDs would be great for distribution of bulky games be they graphic adventures, big-sprite classics or whatever.

As for Dragon's Lair -style interactive video, it's hard to see how this can ever match the level of player involvement most games players have come to expect. Several software houses have interactive video projects under development, but the gameplay problem isn't going away, 'Interactive video games like Dragon's Lair are something of a dead end - a cop-out,' opined David Braben (he of Elite and Zarch fame). They only have a simple tree structure which gives the player very little to do. The way to get TV quality graphics and gameplay together is by sheer processing power - but that's looking in the very long term,' (Cf. the White Wizard's views on multiple choice adventures in ACE 3.)

games a better price. Will sprites rise to the challenge, or just fall by the wayside? I don't think sprite games will ever die out," said ST programmer Tim Moore, but they'll certainly take a beating. 3D games are a lot harder to write though - there's a lot more to go

The added power of 16-bit technology will not only bring us products with more punch, it will also change the nature of the comes themselves. Certain types of game (strategy and war-gaming, for example) have never really caught on with the massmarket, simply because 8-bit machines didn't tion involved. Suddenly whole new cateat the closet - take a look at Rainbird's Universal Military Simulator, reviewed in this issue - games that really do bring us one step closer to building a complete 'game-universe' inside a computer. Fasten your seathelt and prepare for take-off.

## On-line low-down

Adventures down the phone line are nothing new, but how about online arcade games? You can already play things like Flight Simulator II or Doctor Sott's Double Phantom with a friend, your plant being visible on his micro and his on yours. If he's sitting in the same room as you it'll just take a connecting cable, but if he's on the other side of town (or the world!) then a modern each will have the two of you hooked up courtesy of the phone company. That's still some way short of the interaction you get in a decent multi-user (adventure) game, but there's no real reason for this gap. A system where half a dozen players from across the country could join in one game of an Elite- or Gauntlef-style game should be possible - provided, that is, there was enough money to make it worth the programmers' while - but there would be problems

The bottleneck is the actual phone connection: with the poor quality of existing BT lines, it's a tough task cramming the information into them fast enough. To get a smooth game your micro has to tell the central system what you're doing, and find out what everyone else is up to, 25 or even 50 times. a second. That's a tall order on today's phone network, though there's some promise that BT's new System X will make higher data speeds a sight more reliable



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The DG20 was reviewed in Issue 1 of ACE. It features 20 preset voices that you can combine with sustain, reverb, mute, and soloichorus effects to take you straight into the charts. Sack the drummer - you've got 12 PCM (Casio's Pulse Code Modulation system) drum rhythms as well as four built-in drum pads to get things moving. There's also an 11-step transpose facility, footswitch, headphones, and built-in speaker. Add all that to the MIDLOLIT facility and you've not a powerful instrument for generating a whole range of musical effects. Normally it would set you back £279 (including VAT)\_but we're giving you the chance to walk away with one for the price of a

This little gem really shows off Casio's paces. It's their latest model (RRP £225 + VAT) and offers no less than 40 preset tones, from Typhoons to Pearl Drops, Pipe Organs to Violins. It's eight note polyphonic with a four-octave mini-keyboard and is packed with features, including

- Chord/operation memory, which gives you a basic sequencing function holding a stunning 1304 chord entries and 395 operational changes. - 20 superb PCM auto-rhythms. - Auto-accompaniment, featuring the Casio

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The MT600 features PCM rhythms. Does PCM stand for: (Tick appropriate box)		Your answers to these questions will	
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Your answers to these questions will help us to bring you a better magazine... How much do you enjoy the different sections of ACE? Please rate

each of the following sections out of 10:

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issues of ACE?

ing Ltd and Casio Electronics Company Ltd. 2. Only one entry per person is allowed. 1. The winner of the DG20 pul-1. In competence is open to an insternal of the United Angigoria and the required of instern issuing or impropries on victim recogning controlled instruction of the United Angigoria and the Controlled instruction of the United Angigoria and Controlled instruction of the United Angigoria Controlled in the United Angigoria Controlled in An entries must be received by first post on Friday January 8th 1988. 7. The decision of the judges is final and no correspondence can be entered into

HIT GAMES

OVER



COMMODORE SPECTRUM + 3

DISK

FEATURING

GAMES

tion graphics created using Dicomed's Producer XP graphics workstation

here's no doubt that good graphics sell computers; how how many Atani ST's and Amigas have been sold on the strength of such famous demos as Shiny Bubbles or the Juggler?

Spending \$50,000 on a computer for its graphics capabilities alone is another thing altogether - yet that's what the exhibitors at the October Computer Graphics '87 Show at

London's Wembley Conference Centre were trying to convince visitors to do. The eighth show of its kind. CG87 included a festival of computer-animated films, a displays from almost 150 companies

series of very high-brow conferences, and involved in the very big business of making computers make pictures. The results were mind-boggling: a flood of images, some just about within the capabilities of high-end home computers, others so realistic that it was hard to believe they were rows of pixels and not the real thing

The show covered four main areas: imaging, business graphics, pure design and animation. Imaging is the jargon for the transfer of computer images to other formats: obviously, however striking your picture, it's not doing you mucy good sitting on a computer unless it's intended purely for use in a game. Hardware such as digital still came.as, movie cameras, multi-colour plotters and laser printers was on show at prices to make your eyes water.

Even more expensive were the graphics systems themselves. At the low end, IBM PCcompatible software systems such as those from Dicorned and Genigraphics can produce a huge range of charts, graphs and diagrams using a simple data entry routine. The results can be polished up with different

## COMPUTER **GRAPHICS 87**

Next time you're trying to do some animated 3D on your ZX81, you might like to think about what you could create if you could only save enough money for a really powerful machine - something costing a mere 20 or 30K, perhaps, Computer Graphics 87 displayed the Ferraris and the Lamborghinis of the graphics world. Chris Jenkins went along for ACE: he didn't have enough cash to buy anything. but he did bring back this report.



Animated graphics from Access ad, by Digital Pictures.

text fonts, selectons of colours and background effects, to produce a slide or overhead projector image which should help convince the manging director that you really do deserve that raise.

## **Amiga Workstations**

You can also put together an impressive graphics workstation using a Commodore Amiga 2000, with an additional maths coprocessor chip, hard disk and plotting tablet. The Scottish Amiga Centre showed a system working out at around \$8000 which produced some impressive work using software packages such as Sculpt-3D and Forms in Flight. Remember that in this world, £8,000 is considered a bargain-basement price.

The Amiga's 4096-colour palette and 640x400 pixel resolution is certainly impressive compared to most eight-bit computers.



The real heavyweights in the graphics world, though, boast palettes of over sixteen million colours, and resolutions up to eight

## The heavyweights...

Many of these are used for technical applications such as CAD (computer-aided design), or graphical analysis of geographical, meteorogical or metallurgical data. The same systems, with different software and peripherals, can also be used to produce pictures which no paint-and-paper artist could ever hope to create.

Letraset's Illustrator system, for instance, uses a 1024x768 pixel display and a palette of 248 colours from a choice of 16.7 million. You can either create a picture from scratch, or feed in a scanned photograph, or a video image, and rework it.

Illustrator features all the controls you would expect to find on a home computer paint package; polygons, solids, lines, brush shapes, airbrushes, flips, zooms, rotates and so forth. The finished picture can be output to film, colour printers, or video.

Really powerful systems like the Dicomed Producer XP make Illustrator look like ZX80. This £52,000 system has 46 Mib of data storage on hard disc, and a maximum output resolution of 8000 lines. No wonder some Dicomed images look so real that you want to reach out and touch them.

...and super-heavyweights So far we've been talking about sytems with mere telephone-number prices. The next step up are the intercontinental telephone number machines, often over half a million pounds, which produce the sort of images which you see every day on television.

Perhaps the most impressive source of



Smartles ad , by Digital Pictures: more computer animation

tures, who are responsible for the ITN News and Opportunity Knocks title sequences, and Smarties, Access and Yoplait adverts - these represent the most sophisticated computer graphics commercially available

A typical Digital Pictures production begins with plans or solid models being converted to digital form using sophisticsted scanners. Some objects such as mountainous backgrounds can also be created "procedu-

rally", using techniques such as tractals. The results are stored in a Data General MV10000SX mainframe, then transferred to on IRIS 2400 realtime animation suite. The animation is set up using a wire frame representation of the various objects to be incorpo-

rated. These are manipulated with cursors to control the animation speed and direction. Key frames are defined, and the inbetween frames automatically generated by the computer.

When the animation has been planned, the information is transferred to or "frome Store" where the details of colour and lighting can be added.

using techniques such as the deligitfullynamed "Phong Shading" which realistically represents smooth reflective objects. Techniques such as "texture mapping" allow video, computer or painted images to be incorporated into the animation, and other properties such as subtle texturing.

transparency and translucency can be simulated too The whole animation can then be downloaded into a video editing system such as

animated computer graphics is Digital Pic-Quantel Paintbox, or incorporated with live action, before the finished piece is transferred to video, or to film at 2000 line resolution.

The results are simply staggering, as you can see for yourself from the graphics shown here. The cost, though, is equally staggering. so what can the budding computer artist hope to achieve with affordable equipment?

## What's in it for you? While the Atari ST and Commodore Amiga

can already produce impressive results using software such as Aegis Animator, and hardware video genlock systems, the next wave of home computers will be even more impressive graphically.

Already, Acom's £800 Archimedes is creating a stir with its

Reduced Instruction Set Computing (RISC), which enable sophisticated graphics to be animated better than ever before on a home computer. Atari, too, is planning a transputer sytem which boasts resolutions from 1280 x 960 in four colours to 512 x 480 with 16 million colours avail-

able. Again the processing speed will be such that animation and video interfacing capabilities should be

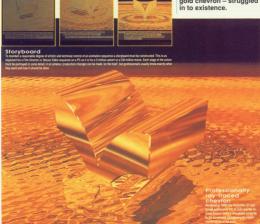
Techniques developed on the extremely expensive workstations used now will inevitably be avialable to the home user when the price of the tecnology comes down - as it inevitably will. So next time you see a stunning computer animation on TV, reflect that this time next year you might even be

able to do the same thing yourself.



## THE GOLD STANDARD

Some of the most advanced computer graphics you're likely to see is when you watch the old telly; adverts and, in particular, the station logos take the technology to its very limits. Brian Larkman brings you the story of how one such logo – the Yorkshire TV gold chevron – struggled in to existence.



miles you live in London and only ever worth Thames TV - and ACE roaders are more adventurous than that, arent they? - you must have noticed a huge ancrease in the quality of TV sistem letters to topour an importance of a largely due to the growing importance as the property of the control things of the control things of and has been solitowed by a host of other computer-designed and animated logos.

Another landmark in this process was reached in February of this year when Yorkshire TV unveiled their own new ident, a gold chevron Y rotating above a sea of liquid gold – so forcing Thames to postpone their own Tiquid loop!

It's a simple enough image you might think, but a second look would seveal that the liquid from which that tyles chevron emerges is incredibly realistic. Anyone who has ever tried to draw even a static image of a liquid surface will reclise how complex if can be, especially when more than one source of waves is involved.

The story of how this degree of realism

was achieved illustrates perfectly the complexifies of producing broadcast-quality computer graphics. It also shows how quickly the techniques of the graphics industry are becoming available on affordable home computers.

## The cutting edge

As with almost every technological endeavour, the most original computer graphics are developed from ideas formulated by software engineers working at the cutting edge of sesearch. One thrust of this edge has been



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ing a new ident for YTV, Jett Parr - head of promotional graphics for the company - was ambitious: I wanted to do something impossible" he says: and McEwan seemed to be the man for the job. Discussing the various impossibilities with Electric Image the idea of a moving liquid surface seemed the most likely. The next step in realising such an idea

approved by the YTV management. They show the various stages of the animation:





RT - all those chone bills pay for some nifty graphics

#### TV station Identity Symbol

For a variety of reasons, the production of station logos - idents - has become the testing ground for new computer graphics techniques. TV companies are not shy of spending cash in competition for both viewers and advertisers, so the prestige of a successful logo is important. TV companies are also in collaboration with the advertising industry: its financial clout and technical expertise in ramming home a visual message are readily available. Flashy idents that are more than just corporate symbols are therefore almost

the emergence of the glistening gold chevron from the liquid gold; the surface uncannily like the final image when you consider the software was not yet written; the solid yellow Y rotating against a black background. Next came the difficult bit.

#### Simulating software Having said that he could do the impossible

Stuart McEwan now had to write the software to set up the simulation. This was to involve the first commercial use in Europe of liquid simulation with Ray Tracing - but using the same basic principles as are available to Amiga owners from Sculpt 3D. order to devise the algorithms that accurately reproduced the movement of a liquid when acted upon by arrange of forces. including wind and tide. For example, one source of waves produces a straight line or concentric rings; two sources give interference patterns; more than two and the picture becomes very complex.

Three months of working day and night

and the simulation was complete; but although it was technically correct the surface movement still lacked a certain something that McEwan could not quite get right... answer. In the end the finishing touch was provided by Jeff Parr; after a few hours sketching the water movements from his

With the insight that these sketches provided McEwan was able to perfect the animation a fine example of the value of col-

#### A system called Doris A still from the final sequence can be seen

on the previous page. Electric Image use a system they call DORIS. It consists of a VAX11/780 connected by Econet to four Silicon Graphics IRIS workstations and a Gould POWERNODE frame-buffer developed by Recliffusion for their flight simulators. Altogether, a pretty powerful system costing sevand hundred thousand pounds. Nevertheless, the final image shown above took over an hour to render (paint) - though it IS produced at an incredible 16, 000 line resolu-

The final sequence, rendered at lower resolution, took 23 minutes per frame. This compares to about 30 hours for the mockup of the YTV chevron produced using Sculpt home computer. If you have the time tion time - it is even possible to make an ani-3D - by Sculpt3D author Eric Graham - will cut this time down a bit and make animating a ray-traced sequence rather easier. Your results will be poor compared to DORIS's - but then she cost 1500 times the price of an Amigα! ●

#### **NEXT MONTH**

Next month we promise - cross our hearts and hope to die - that we'll be bringing you a selection of readers' artworks; pressure of space in this Christmas issue meant that we had to hold over those exciting pictures.

And if you don't think you're in a fit state to be showing your work

around at the moment, don't worry - we'll also be starting our How To Do It series on computer graphics; could you be the next Leonardo? You won't know

unless you try; so don't miss the next ACE!



Amiga ray-traced chevron

Produced with Sculpt 10. Obviously much lower resolution but the reflective effect is still quite dramatic. The most obvious clue to the differ ence is the clear aliasing (agging) and the less pleasing reflections. After a week of trying to get this effect with the Mirror Texture option it. became obvious that Shiny actually was the correct choice. As each full ray trace takes about 20 hours it can take some time to detect such errors. The pro version uses sophisticated specular reflection algorithms not available from Sculpt

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# ARCADE

ACE

Fearless reporter Chris Jenkins strides in to the arcades to struggle with squidoids in the horrifyingly funny Xenophobe, then blasts heffalumps and vacuums a few ghouls in Ghostbusters



#### XENOPHOBE Bally Midway

20p per game

Xenophobe is so marvelious that I had to be dragged away from the screen screaming and locking. Based very loosely indeed on the plot of the movie Aliens, if combines sublime carbon-style graphics with non-stop

Both of the maximum of three players be a guin-grip with a trigger and two thumb-buttons. The screen is split into three straps to show each players point of view. As the game propriesses, the players can either stick together to protect each other — in which case the view in each strip is the same — or go their separate ways in to different deeps of scenery.

The game is set on a space shuttle infested with the most revolting, slimy, aggressive



righting off the squidor

mutant monsters you could imagine. The characters - blessed with with names such as Dt. Zordirz (geddit?) and Colonel Schikn - bear a

blance to familiar faces from Star Trek and initially materialize in the transporter room of

As you move through sets of sliding doors into the separate chambers, you will be ortacked by a nauseating selection of monsters, scuttling squidoids which try to eat your legs, shell-like creatures which shoot forth strangling tentacies, ray-eyed mulants who melt your brain, and the horstlying, leaping slay-like Xenos themselves.

At each moment labels appear below the screen to show the current function of your two thumb-buttons. This cam be to jump, crouch, throw off a monster, pick up a gun, throw a bomb, or use mother object. The main trigger is always either Punch (if you have no gun) or Shoot (if you do.) An intestation level display appears at regular internation the solid of the contributions of

While bicating your wery through backs or slimy mutants is all very well. you will need to use some statisgy to clear the shuttle before it self-destructs; using stoppy disks, chemicals and pass cards to gain control of the ships defence system and wipe out disens state. Otherwise you will overnum and will be either granwed to the bone or transported book to the ship when your time runs.

Xenophobe is outrapeously funny, with

some real moments of horars as ventracles have through the couling, and you by the that out and they are the control of the country and the that out and the to set you have off the throat can be the companying sound effects lower little to the imagination, and the facial expressions of the chamaters as they meet each hew horars are illustrous. Goodness knows how long it would take to master this game, so compone places produce a home micro version, before I spend all my money.

#### GHOSTBUSTERS Data East

20p per game

It's been a long time coming, but finally Ghostbusters has made it to the accades. To be accurate, this is The Real Ghostbusters, based not on the film but on the American cartioon series, as yet unseen on this side of the Atlantic.

The good news is that the game is nothing like the Activision home computer title, which was well-received in its day but is only average by today's standards. The coinop is a tast-moving shoot-em-up with plenty

Featuring convincingly synthesised music from the film, and a selection of ear-



bending sound effects, Ghostbusters caters for up to three players at at a time. The three control bandles and sets of fire buttons are arranged in a semi-circle, and extra players can join in at any stage of the game.

The rules are pretty simple: move your nicely-animated Ghostbuster across the roof tops, fighting your way through hordes of attacking monsters. If it moves blast it, and if it doesn't move, blast it anyway to be on the safe side. Your rapid-tire energy gun will blow away most of the ghoulies you encounter: you then use your sizzling beam weapon to vacuum up the resulting spectres in to your back pack. Go mad with either weapon, though, and your energy will fall to a fatally low level. It's almost impossible to get through the

early levels without a little teamplay; ideally, two players shooting monsters while the other vacuums them up. You'd have to take turns, of course, since the more ahosts you capture, the higher your score.

The monsters are areat: winged balloons phantine blobs, and cowled and fire-hurling warlocks. To help you out there are several icons to pick up; a Ghostbuster logo to extend your firepower, a globe which gives you a temporary shifeld, a battery to boost backpack power Beware of the skull which appears when you kill pertain monsters; this will dangerously drain your energy Many of the special bonus

icons are surrounded by bobbing spikes. It takes precise to manoeuvre through these while fighting off attacks, but if you mangae it you get the change to capture the Green Ghost - a fast-moving spook which scores you a big bonus. Watch out, though, for the time limit on each level and your continuously falling energy reserves.

Ghostbusters is enormous fun; in many ways it's a noisier and flashier version of Gauntlet. While Ghostbusters doesn't have the maze element which made Gauntlet so compulsive - the next level is always accessed across the narrow tootbridge at the top of the screen - there's the same sense of frantic action and the demand for co-operative play. Should be a hit - especially if the rumoured Ghostbusters 2 movie really does make it to the screens.

#### FREE SOFTWARE!

Every month there's a fabulous software prize for the best arcade tip printed in Tricks 'n' Tactics. Last month Deano Schofield picked up a copy of Starglider in return for his Double Dragon tips; next month it could be you - but only if you put pen to paper and get scribbling. Send the goods stating which computer you own -

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But if you don't



## KEYBOARD CAVALCADE

..So you want to make music with your computer, and you know that the best way to do it is with a MIDI keyboard. Where do you go from there? Chris Jenkins checks out the competition and conducts a few auditions.

OVER the last couple of issues we've introduced the concept of MIX. It is Musical instrument Digital therefore standard which diloves your computer to control destal which diloves your computer to control electronic musical instruments and effects. We've explained something about the necessary interfaces and musics offwere practice and the property of the property

We've set a price limit of \$600, which allows us to include some pretty impressive instruments without going over the top. First, though, a few notes about some of the jargan you're likely to encounter in your search for the perfect music set-up.

The two main classes of MIDI instruments are symbesteers and home keyboards. While the technology involved and the sounds produced are often very much the same, the two types differ very much in the sort of facilities offered.

Home keyboards are intended to be an end in themselves for use entendaning youself and the tamily. They normally howtenders such as drum machines, single-timger chords, and auto-accompariment built in they often feature battery power; and fley almost disveys include built in speakers, so you don't need to connect them to an amplifier of he for how they have the pro-

Boarly you are given a small selection or greet cours on one here hydrocal or other keyboard or greet sounds on other keyboard course or greet course or selection or the celebration of the other hand, official never include built-in drume monthers single-finger chards or other occumpanisment features. They do though, have a time selection of sounds white or district or structure white or the selection of sounds white or selection of selecti

The simpler choice, then, is to buy an allin-one home keyboard. If you have any real commercial musical ambitions, though, go for a more fiexable synthesiser: but he perpared to find yourself almost inevitably going on to spend money on a selection of drum machines, echo units, synchronisers, mixess, porth bays, multi-track recorders and the whole technological Spaghetti Junction of modern electronic recording.

#### Yamaha SHS-10 \*\*\*\*

Latest and zaniest MIDI keyboard on the market, the SHS-10 is stung over the shoulder and played like a guitar. The two-and-a-half octave keyboard is a little short for serious use. Sited on the neck are the pitch-bend wheel and soft-touch controls for rhythms, autochords, effects, sequencer and the demo tune; Wham's 'Last Christmas'. Nice FM sounds, but a pity that there's no MIDI IN.

SOUNDS DRUMS FEATURES SPEAKER MIDI PRICE

32 miniature, F-C 25 FM presets, 8 note 25 FM ABC, chord sequencer etc 2 watt OUT only

in the ploth-born whole and sub-touch

#### Technical terms

A few helpful distinction. PM is Requested, White Medicalization, the display process by welf-working produced process by welf-working process to make the process of the p

Were learning out of this feature serecologic keybocardises MEID synth module – such as the Reland ME-32 (reviewed its month). Yarmaha: TX-8IZ and oil. DEE-12.24 – show one sheye not much go without a controlling keybocard yourse in likely to buy one before anything else. Als out are cheap sampling keybocards such coases SX sense which don't have MEI and many useful discontinued or obselved instruments, such as the New XX-80. Roland Juno 6/60, which can now be picked up for a couple of hundred pounds

#### Ratings

The XYIID congory list the sam, number of spond for keys SOUNDS the number of posed programmable sounds ovariable and the number of violes which can be proved simultaneously. The polyphony DRMAS the number of dythin pattern ovariable FRATURIS the correspondence for the sequence scarceles FRATURE the number and power for the built search sounds of such that the polyphony of the built search sounds of the built search sounds of the built search sounds of the sequence that the september of the built search sounds of the section of sounds of the section of sounds of the search sea

IN CVIT, and text shade-excitations, TIME which powers Milk data unchanged to another instrument. Identify several to be consider startument. Identify several to be consider startument. Identify several to the control texture vital more several subjective the better. This takes everything including price with the control texture vital several sever

#### Farfisa FK 58

One of the many Italian keyboard manufacturers, Farfisa doesn't quite seem to have got the hand of the modern keyboard business (but check out their TK80, a later model reviewed below that promises well for the future). The MIDI features of the FK58 only work on MIDI channel 1, and for some reason it includes an RS-232 port which appears totally useless. Conventional organ-type sounds rather than FM.

KYRD Full size, 61 notes C-C SOUNDS 6 preset analogue, 8-note DRUMS я

**FEATURES** SPEAKER MIDI PRICE

SFC, Arpeggio, Trio IN, OUT, RS-232

\*\*

\*\*\*\* Notable for its full-sized keyboard the KR200 produces some full analogue sounds and excellent preset and programmable PCM rhythms. It also features a very powerful speaker, but bear in mind that it's mains powered only.

KYBD Full-size, 61 notes C-C SOUNDS 10 preset, 8-note DRUMS 12 PCM, plusprogrammable FEATURES Autobass, SFC, Arpeggio etc SPEAKER MIDI

#### Casio CZ-101

PRICE

\*\*\*\*\* Officially discontinued now, the CZ-101 is still available in many shops and shouldn't be ignored. The first Casio to be based on Phase Distortion, a simpler version of Yamaha's Frequency Modulation, the CZ-101 is capable of creating some excellent realistic and synthesised sounds. Multi-timbral over MIDI (it plays four voices monophonically at the same time) the C7.101 is fairly easy to program. The big beef is that there are very few on board sounds, and extra RAM cartridges are ridiculously expensive and hard to get. Like the Yamaha DX-100, the CZ-101 has miniature keys, and if you can't stand these you should look out for one of the larger CZ

Miniature 49-note C-C SOUNDS PD, 16 prese, 16 programmable, more on RAM DRUMS FEATURES SPEAKER

IN,OUT, THRU

6299

#### Casio CZ-230-S \*\*\*\*\*

A corker. Using stunning preset sounds based on Casio's impressive Phase Distortion synthesis. the 230-S also features heavy PCM sampled drum patterns, and such professional touches as a pitch bend wheel, portamento (glide between notes) and full MIDI. It's multi-timbral over MIDI (playing up to four different sounds at once under control of a sequencer), and there are also four programmable memories, though vou'll need a

software editing package to use them. Basically a preset version of the famous CZ-101, and dead

KYBD miniature, 49 C-C SOLINDS 4 programmable, 8-note DRUMS 20 PCM, preset/programmable **FEATURES** Rhythm chaining

SPEAKER 3W MIDI IN, OUT, THRU (Multi-timbral) PRICE

One of many keyboards featuring 'teach-yourself music" facilities. The 210 accepts ROM cartridges containing preset tunes. LEDs above the keyboard light up as the tunes play, waiting for you to hit the right note before continuing. Programmable PCM rhythms and full-size keys add to the 210's attractions for novices.

KYRD SOUNDS 10, 8-note DRIIMS **FEATURES** Autobass, SFC. memory, arpeggio etc SPEAKER 1000 MIDI IN, OUT PRICE

waveforms, programmable filter and amplituid envelopes and selectable MIDI channed. Worth seeing, if a touch over-priced. Hohner also over duce this model, badgeD as the Hohner KS49 but if'll set you back an extra £20.

KYRD Miniature 49-note C-C SOUNDS 20 upr. 10 lwr, editable, 8-note DRUMS PCM **FEATURES** SFC,Chordsequencer. autobass, harmonise etc.

2x1w MIDI PRICE

\*\*\*\*

#### Casio HZ-600

Getting confused by all these Casio's yet? I know grammable hybrid with simplified PD-type sounds Features include RAM cards for extra voices and song storage, 32 digital waveforms, five LFO waveforms, programmable filter and amplitude envelopes and selectable MIDI channel. Worth seeing, if a touch over-priced.

KYRD Full-size, 61 notes C-C SOUNDS 20 upper, 10 lower variable, 8-note DRUMS SPEAKER MIDI IN.OUT. THRU PRICE 6349



Casio CZ 230 S

#### Casio CPS-101

Bet this one caught you out. It's a digital piano, the cheapest around. The CPS-101 is touchresponsive, playing louder or softer according to how hard you hit the keys. Touch sensitive keyboards are usually weigh in at much higher price tags, so this model is worth looking at for that feature alone. Its ten presets allow you to choose acoustic, electric, honky-tonk and other types of sounds - but does it sound like a piano? Well, it's a tenth the price of a concert grand.

KYRD Full-size, 61 note C-C SOUNDS 10 preset, 8-note DRIIMS **FEATURES** Note sequencer SPEAKER 2v 5W MIDI IN, OUT, THRU PRICE £349

#### Casio HT-700

Using a much simplified version of PD synthesis. the HT-700 hits a nice balance between preset and programmable, home keyboard and synthe-

Features include RAM cards for extra voir and song storage,32 digital waveforms, five LFO

#### Casio CT-630 \*\*\*\*

A big crunchy keyboard, this one, with lots of sounds, ryhthms, clever gimmicks and MIDI facili

Some original sounds like Typhoon, and Plunk Extend along with the standard Jazz Organs and Marimbas; nice to hear modern electronic sounds along with the other drums, too There are three MIDI modes which split the key board into different zones, but as it only transmit on channel one, this isn't as useful as it sounds Once again, there's a Hohner lookalike - the PK100

Full-size, 61 note C-C SOUNDS DRUMS **FEATURES** SFC. Autoharmonise. keysplit etc SPEAKER 2x 2W MIDI IN OUT THRU

PRICE

#### Yamaha DX100 \*\*\*\*\*

An incredible package, the DX-10 synth is exce lent value and produces great sounds, including howling guitars, wicked basses, clanging pianos

MIDI

PRICE

zooming synths and bright strings.

S D

FI S is.

м

nd

Fully-programmable, 'four-operator' FM technologh - like that of the world famous DX7, but cut down a little - combines with protability, full MIDI spec and a massive 192 preset sounds, which can be transferred to and edited in the 24 programmable memories

Pitch bend and modulation wheel, breath controller jack, LCD editing display, and a host of other features make this the choice of the dedicated muso on a budget. If you can't stand the mini keys, check out the DX27 - 61 full-size keys plus an almost identical spec - but £150 more!

YBD	Miniature, 49 notes C-C
	12 preset, programmable, 8-note
RUMS	NONE
EATURES	NONE
PEAKER	NONE
IIDI	IN, OUT, THRU

Like the others in the HT series, a good cross between programmability and presets. Clean, full sounds using 32 Waveforms, five LFO waveforms and programmable filter and amplitude envelopes, adjusted using a rotary dial. Lots of auto features, plus splittable MIDI inputs to drive the melody, chords bass and rhythms seperately. Worth looking at if you want something with more auto features then the CZ-230S. Again, the Hohner KS61 is almost identical, but pricier



The cheapest Yamaha MIDI home keyboard is an impressive beast, featuring excellent FM voices and PCM drums. MIDI implementation includes selectable channel in/out, and even synchronisation by MIDI clock pulse to the drum section. which few home keyboards can boast. Not too many extraneous frills, either; overall possibily the

KYRD	Full-size, 49 keys C-C
SOUNDS	FM. 16 preset
DRUMS	16 PCM
FEATURES	SFC, autobass, memory etc.
SPEAKER	2x 2.5W
MIDI	IN, OUT

#### Viscount KB 550

best home keyboard at the price.

Realistic digitally, resynthesised samples form the basis for the KB 550's sounds, so it's more interesting to play than many home keyboards. MIDI implementation includes OMNI on/off, and internal or external clock control of the accompaniment features. A good keyboard, then, but a little



KYBD	Full-size, 61 note C-C
SOUNDS	20 upr, 10 lwr, more on RAM
	cards, 8-note
DRUMS	20 PCM, more on RAM cards
FEATURES	SFC, autoharmonise/bass, etc.
SPEAKER	2x2W
MIDI	IN, OUT, THRU
PRICE	£425

#### Elka EH105

y-

Elka has only recently broken away from the organ-only end of the market, and the EH105 shows some promise for the future. Good preset noises similar to Yamaha's FM, with four programmable memories featuring parameters for waveshape, timbre, and pitch and filter envelopes. A very good selection of seventeen PCM drum sounds in the programmable rhythm section, and splittable MIDI channels.

\*\*\*\*

KYBD SOUNDS	Full-size, 61 notes C-C 15 preset, 4 programmable,
DRUMS PO	8-note M, 18 preset 4 programmable SFC, chord memory.
SPEAKER	solo chord etc 2x 3w

KYBD	Full-size,61 notes C-C
SOUNDS	10 preset, 8-note
DRUMS	12 PCM
FEATURES	SFC, autochord, memory etc.
SPEAKER	2x 5w
MIDI	IN, OUT
PRICE	€495

#### Farfisa TK80

Lots of interesting features here. The preset sounds are digitally re-synthesised from samples. and there are 'special sounds' in which a percussive and sustained tone are lavered together. You can program your own PCM rhythms, and the MIDI implementation includes variable channels for transmit and receive, and splittable sections. It also responds to MIDI Program Change and Song Pointer information, which is unusual. Check it

SOUNDS	30 preset
DRUMS	16 PCM
FEATURES	Autochord, memorychord,
	autosolo, trio etc
SPEAKER	2x 4W
MIDI	IN,OUT
PRICE	£499

#### Gem DSK-6

Realistic Sample Wave Processing gives good effects and you can layer two of them together to produce thicker sounds. There are also manual play buttons for the separate drum sounds, good MIDI implementation and excellent speakers.

KYBD	Full-size, 49-notes C-C
SOUNDS	16 preset, 8-note
DRUMS	14 PCM
FEATURES	ABC, harmony,
	enchanced accompaniment
SPEAKER	2x 5W
MIDI	IN, OUT
DDICE	2552

#### Kawai MK-10

The business. Based on Kawai's Digital Waveform Synthesis, the MK-10 sounds great and has some awesome features; velocity response (hit harder and it plays louder), pitch bend wheel, keysplit, stereo rhythms, full MIDI with different channels for the bass, solo, poly, counter melody and drums, portamento, two massive speakers, and you can even play the drum sounds from the keyboard. A complete MIDI studio in one box.

KYBD	Full-size, 61 notes C-C,
	velocity sensitive
SOUNDS	18 preset, 8-note
DRUMS	16 PCM
FEATURES	SFC, memory, dual, trio,etc
SPEAKER	2x 10W
MIDI	IN, OUT, THRU
DDICE .	6898

#### Viscount KB-880

Digitally re-synthesised sampled sounds here again, but this time you can combine waveforms, envelopes and modulations to produce 10,000 combinations. Very powerful accompaniment and sequencer options make the KB-880 an impres sive if expensive choice.

KYBD	Full-size, 61 notes C-C
SOUNDS 1	10 preset, programmable, 8-note
DRUMS	14 PCN
<b>FEATURES</b>	SFC, chordmemory
	autoplay, sequence
SPEAKER	2x 8W
MIDI	IN,OUT

#### Yamaha PSR-60

Similar to the PSR-50, but features the Music Pro grammer, a sequencer which allows you to record chord, bass and solo tunes separately, then play them back together with the other accompaniment features. MIDI clock synchronisation to external insturments is supported, and you can playthe PCM drum sounds from the keyboard. Plenty to get your teeth into.

KYBD	Full-size, 61 keys C-0
SOUNDS	16 variable FM
DRUMS	16 PCN
FEATURES	ABC, SFCM, duet
	rhythm vary, etc
SPEAKER	2x 2.5 w
MIDI	IN,OUT
PRICE	259

A few points remain in our discussion of the MIDI (Musical Instrument Digital Interface) system, which as you should all know by now is the standard communication system.

Everything from synthesisers, keyboards. samplers and electronic pianos to effects. digital quitars, wind instruments drum machines and sequencers can be processorcontrolled and thus MIDI-equipped these days. In the case of the last two conteneries we're talking about units which make things happen over a period of time - playing musical notes or drum beats in the pre-programmed patterns at a speed decided by

Using several such units together means locking their running speeds together, since they're bound to drift apart even if you set their displays to the same BPM (Beats Per Minute) value. MIDI includes several timina codes to help you do this; the most common is the simple Timing Clock (which has been affected by changes in the MIDI standard since its launch; we'll concentrate on the current state of affairs, but point out that early MIDI instuments may need an update chip to make them compatible with the latest models).

If a sequencer or drum machine is nonning, it sends (or receives if it's slaved to another unit) the MIDI TIMING CLOCK (code 248) at a rate of 24 times per guarter note: these clocks are sent in between other codes such as NOTE ON and NOTE OFF. Being transistor-level binary codes, they're totally different from the Sync 24 clock pulses used by older non-MIDI drum machines, although you can buy interface units to convert one to the other

Other Timing Codes are 250 (start), 251 (continue) and 252 (stop), the operation of which are fairly obvious. You can refer back to Issue 2, page 34 for a complete list of MIDI status messages and their respective codes.

Recently moves have been made to make MIDI compatible with SMPTE, the Society of Motion Picture and Television Engineers' time code system. SMPTE codes, which unlike MIDI can be recorded on tape, are long binary streams containing a time in hours, minutes, seconds and frames, the number of frames per second depending on the television standard being used. This means that there are four different kinds of SMPTE worldwide.

When SMPTE timings are expressed as MIDI codes they're known as MSMPTE (MIDI-SMPTE), or more popularly, at MTC (MIDI Time Code). Very few MIDI instruments respond to MTC as yet, but it's the coming

thing, and will mean that you can lock your MIDI drum machine or sequencer to a film or part of the tune wherever you start playing back the pictures.

#### In control

Engligh of time codes. The other main area of MIDI we haven't covered is Controllers - the knobs and pedals on your synth which give expression to your playing.

Pitch benders, tootswitches, footpedals and breath controllers are all MIDI Controllers. MIDI assigns plenty of godes for such purposes but doesn't specify exactly how they should be used, except in the case of the three-byte code 1011AAAA, OBBBBBBB OCCCCCC. This indicates Controller Information plus channel number (A) controller number 0-127, and controller value 0-127.

When B=0 we're talking about the synth' Pitch Bender, so obviously MIDI can bend the pitch of any synth on any channel from (

Controller 0 is always the pitch bender but other knobs or sliders (continuous con trollers') can be assigned to any controlle number 1-31, and on/off switches can be assigned to 64-95.

Control by velocity or after-touch on the keyboard, which could open or close a filte change a Modulation Index or increase vo time or vibrato death is dealt with under di ferent channel information categories: that is there are different codes for each categor but every one can be assigned a MIDI char setup is affected.

Lastly, there's a MIDI Sample Data Dum standard in the process of development if hardly complete yet, since everybody's san plers work in different ways, but mo samplers will now allow you to exchange sample waveshapes via MIDI if not all the details of loop points, filtering and so a double the normal speed for MIDI data trans fer; it may be that all of MIDI will be speede up to this rate before long, but the esta lished lower rate will probably not be con pletely superceded.

### PANEL OF EXPERT



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# PLGRIM



What a Christmas! The Pilgrim joins up with the White Wizard to take you on a red-hot romp through Plundered Hearts (is bondage back in fashion?): Nord and Bert Couldn't Make Head nor Tail of It (but can you?); Beyond Zork (FAR beyond Zork!); Pat's Patch: Shades Diary: and just about everything else you always wanted, except the brushings from Ol' Whitey's beard. So drop that rod and staff and read on...

**EUNDERED HEARTS** 

Do INFOCOM have the key to your heart?

....You are intensely aware of the strength of his hard seaworn body, of the deep sea-blue of his eyes. And then his mouth is on yours, lips parted, demanding, and you arch into his kiss.

So begins Infocom's adventure into the realist of the committee of the pointing, yearning (but ever so proper) and, clowe all, feminine world of Mills and Boon. Will the challenge of the game make a man of you? Or, if you're already made of puppy dogs talls, will abandoning the tousers for a cotton frack give you a kick worth nearly \$100.

Handly supprising, reality, this excursion into Barbara Cartifand Hardler and the state states at selection. Lunking Monro, was a straight-forward derivative of the horor faction of Hall-Dorocatin and oftens, and Plundered Month simply continues this search for new access of insportion that can bring fresh blood to the activenture scene. There seems like doubt that the boys and give at falsoom and the continues the boys and give at falsoom.

are trying very hand to come up with new stants for us players (take a look of both Nord and Bert and Beyond Zook later in this issue if you don't believe me), so the question in this case is not only whether we have a good new game, but whether we have a good new genne.

As an adventure, Flundered Hearts can be compared with Hitchhikers, in that there is relatively little exploring to be done. The first half of the game involves very See locations or you find yourself on board ship, travelling to St Snistra after receiving a letter from the local big-wig. Jean Ladrad, to the effect that you father is mortality if

En route, the bood you are traveiling on is captured by plates, the captain of whom. Nicholas Jamison, professes to be both a gentieriam and a friend of your fathers. He is also devillably attractive, but more of that close. Throughout this early stage of the game you will have been able to type WATE (or 2) continuously without much all effect, and even if you adopt a more active state.

gy you will discover only three locations, two of which are beds (in which you are alone, I might add).

Finally, however, the pixels ship arrives of \$5 Sinstian and Capan Nick pope of to visit Latond and chop him into pieces. You now have a chance to explore the vessel and solive a couple of puzzles. Only one of these presents much difficulty, and the Pigl judges if to be something of a cheek because it is introduced—it the solution to it appears out of thin act only other you have made a certain number of moves.

Harving escaped from the ship (smd taken care to have everything with you), you make for Ladond's reasidence to find your father. who you now have good reason to believe is a prisoner there. You are also, by the stager, more of less convinced that Capin Nick is a merry del soul, a point he soon for the development of the sould be to drive borne with much laboral contact. The control of the control to the possibility of the control to to peneticate, and the old devid card keep his hands of you. Nether can the other old devid to penetic the control of the control of the possibility of the control of the the control of the control of the possibility of possibility

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- Latond - and the game becomes a challenge to evade the clasps of the one, seek the clasps of the other, and find Papa into

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Compared to other Infocom releases, however, there seems to be much less gameplay in Plundered Hearts than, say, in Sorcerer. There are 25 points in all to be gathered, and the Pilg had gamered 19 in one afternoon's play. The programming's excellent, of course, with various participants coming and going at appropriate times, and delivering appropriate remotes en route. In this last respect the game is slightly similar to bursed, which also notiness consults more.

this last respect the game is slightly similar to Suspect, which also portrays a country mansion where a ball is taking place. So, as far as the challenge is concerned, I

have to say that this is not one of Infocers's best releases. But what about the atmosphere side? What about the style of the text? Most of all (because I know this is what you're all interested in) what about the style normance, the love, the unbridled LUST, the. SDO

There isn't any sex - at least not what most modern juves would call sex. There is however a great storyline and the text is excellent - every bit as good as the early Infocom masternieous, almost on a par with Lurking Horror (one of my favourites). Above all it shines out precisely because it is drawing on a new tradition.

Commodore 64 owners will as usual, erve in fusitation of the lock of a RAMGAVE facility — the 1841 being most unsated to infocom games—and the past is may leel that this game is slightly on the contact of the state of the state of the contact of the state of the state of the more than motion up for all a originally coltable, with adventurely facility or the state of state of state of state of state state of state state

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## NORD'N' BERT

INFOCOM lunacy for puzzle addicts.

FROM submines to weightey, indiscense to the server sides conformed to the server sides conformed the server sides conformed the server sides of the server sides of the server server server of which many be played in any order to yield ordered played in any order to yield ordered played to the server s

You do this by entering each scenario and confronting therein a succession of toppy-havey structions in which the right input form yours truly will transform your location and/or the objects within it. This process is especiated until you have socreed all the possible points within that section and recovered in setum your possword.

Rather than being an adventure in the motifical stees each of these scenarios is neitly just a seese of verbad puzzles. In this stees, agreeping is nother similar to oathy Spectrum orderstures in which you could see the puzzles of the control of the puzzle seed to be puzzles or the seed to the puzzles seed to the puzzles seed to the puzzles seed to the puzzles settlemely easy and the other half almost law puzzles or seed to the puzzles settlemely easy and the other half almost puzzles for this rescen, its adversable to test fixed and seed like a game of Thirvial to the puzzles of the puzzles settlemely easy and the other half almost settlemely easy and the other half almost settlemely easy easy the puzzles settlemely easy easy puzzles puzzle

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#### Nord and Bert Couldn't Make Head or Tail of It

INFOCOM

POCOIN

Applied from substanting the pleasable pursuits but the wonder of emploration. Not of our file for disc imp, the champes on a number of other hostitional olderhatings ploatifs. Fast, these one of discretions. In each boottom is ploatifs. Fast, states on the discretion of the control to the place in question. Startingly, there is no EXAMINE command and this function is performed by typing the mome of the object followed by REUDIN.

Fams of crossword pussive and other times of word-spire allow New Terms of word-spire will low New Ger and Bert Those of us with a disposition for exploration and discovery many first their potencies onely tried. Since puzzle magazimus care the best willing contegory of publications in the URs. the Pilg cam only conclude that deventuring hose spounded a time confegory of computer entire trainment with themsendous potential. I suggest two call them poofels, the judgest poofelies, and look forwards to hosting what reaches think of the low of the milk of the poofels.

#### White Wizard speaks...

...with forked tongue. I'm afraid I just can't allow this issue of ACE to pass me by without making comment on at least two of

First, I reckon Plundered Hearts should get a lower rating. It's ridiculously easy for any seasoned adventurer and it you're paying between £25 and £30 for it you deserve a greater challenge. I agree that the text and the storyline are excel-

While we're on the subject, I can't resist taking a poke at the Pilg for missing the real solution to his 'time-based puzzle in Plundered Hearts. The solution he mentions, which appears out of 'thin air' appears only as a saving grace because he failed to crack the puzzle in time! Caught you there, Pilgy!

Nord and Bert – I really enjoyed this being something of a quit and pruzzle fan but I think the point needs to be made that it is definitely not a game for people expecting a traditional adventure. The best comparison I can think of is The Travelsor Game on the PC (reviewed in this issue). Again, however, firm concerned about the long-term challenge.

I agree totally about the poor control in Staine - It is infuriating - but once you get used to it the game plays reasonably well. Of course it's not a game for traditional adventurers, but I think that some people will get quite a lot of enjoyment out of it. I'd like to suggest a (marginal) improvement on the ratio here.

Oh yes, and before I go, where's the retrospective review of Suspect, eh? Over written again, have you? Make sure it get in next month, fatty. (It will, baldy. Pilg.).

SYSTEM 93 ENCOUNTERS 78 CHALLENGE 85 LANDSCAPE 85 VERDICT 895

## **BEYOND ZORK**

INFOCOM introduce the Coconut of Quendor

ROLE-PLAYING programs tend to still into two types 
- they're either games in which you form a party of ragues to go adventuring (The Bard's Tale. Manchragove. and the Ultima series being good examples) or where you simply build up your own character and its criticulus (as in Machias or Ring of Dark-

Unlike traditional adventures your 'gamepersona' changes during play. You can usually save your character(s) to disk and develop them over several games, often becoming quite attached to them in the pro-

Unfortunately this business of character development tends to be pretry limited because the game formats themselves are limited – usually confined to treasure hunfring and conflict. Purples are basic and there is little strategic planning to do. You just search, steel, and do your best to survive.

Enter Beyond Zork with two mesor advantages: Infocom's strength in game design, and their parser.

The game is of the single character type – you create your persons by sharing out on initial number of energy points between six different artifluties. Endurance, Strength, Dextertly, Intelligence, Corposision, and luck, Inexperienced players should concentrate on Endurance and Strength, since a higher string in these enables you to survive

longer in the initial stages of the game.

The program locks graphics, unlike most other role playing games, apart from an on-screen mapping locality. This in itself is something of a departure for teach only infoom but dithough useful if only displays a few locations of a time. A good map is still a useful asset and the game is essilly charted.

nu clinice that rate guinare designly country.
The Indocom found of imprisery until companions strates from the very first disease, included of the usual hook, disquit disease, included on the usual hook, disquit of the informacio count and you find pulsars on control in anougonation. Success dispends on control immangement of Success dispends on control immangement of Success dispends on control immangement of Success dispends you need choos? 3000 for a good staff of common, spells, weepons, and other gomes.

Beyond Zork is a tremendously enjoyable blend of traditional adventure and role-playing. You've got all the character interaction, nowing and exploration aspects of an

conventure combined with the challenge at manipulating closets for trade and lighting as well as solving puzzles. And, of course, you must develop your character or die in the otherspit. The combination of the two styles gives a game of good leght, win numerous sub-plots, challenges, and dives sons. Ill leaves you with this liftle quote from the game, where you have discovered guard crains in the kitchen of the local for

>PEEL ONION

Ouch! It's tough as leather.

The cook's scowl changes to a malicious grim. 'Listen boy', he says.' 'You look like somebody who knows a great vegetable when he sees one. You want this onlon? 'There's am old bottle of wine lying downstairs somewhere. Bring it up to me in one place and the giant onion's yours.' He glances at the collar door and shudders. 'Simple.'

PARTIES DE MARIA

New screen lay-out for Beyond Zork. The map on the right highlight the current location and gives exit information, but not much else.

SYSTEM 94 ENCOUNTERS 94 CHALLENGE 92 LANDSCAPE 90 VERDICT 920

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SLAINE

MARTECH move Celt from comic to computer

THERE covered to the control of the

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OUT NOW

the Melbourne House approach and improves upon it.

Statue is something completely different, superficially of least Bosed on the 2000AD coming step here of the same name, the program presents a colourally desorted states techning come displays of your location, the characters in it, a text-feature, and above it -a blank area canos which various commands and playing options scroll senothly and parally.

Staine and his side-kick Ukko (both of whom are reasonably faithful in appearance and characteristics to their excellent comic counterparts) find themselves caught up in a

- - -

Slaine – those commands slip across the screen at an alarming rate.
Can you click on Detend before you get the chop? The lower right hand part of the display shows Insquent cames pictures of you location, objects camed, and your vise companion Ulkio.

search and deshoy quest, with numerous open, charvers and other enteries to do for the extracts to do to the extract set of an extract to find the extract set of an extract to find the large time of the extract to the large time of the extract the extract time of th

One thing State and the eather Rehard have in common is the two using a programming techniques over storyline. It not an approach that brings teither takes interest or interes player involvement, but does have a vaulue in showing us differen ways of structuring programs, some of what may be auther developed in hatue. In the meantime, you've probably befler sticking it the comic.

SYSTEM 58 ENCOUNTERS 55 CHALLENGE 68 LANDSCAPE 62 VERDICT 615

#### 54 Advanced Computer Entertainment

C64/128 59.99cs, £12.99dk

SPEC \$8,99cs.

AMS

Games from Infocom and a number of other US publishers have long been released for 16-bit machines. The popularity of the IBM PC in the States ensured it a steady flow of games, and the Apple Macintosh has seen some revolutionary programming on the adventure side. ACE will be giving increasing coverage to these games in the coming months, but here are a few tasters to whet your appetite:



This is the first of a series of games originally written for the Mac and now appearing on the ST, cour tesy of Windscape in the US (and distributed by Mirrorsoft in the UK). Quite apart from some excellent graphics, the system allows you to use the mouse to open doors, select objects and even move them about. Here you see the Pilgrim raising a desk to check there's nothing underneath.



Thieves Not many people this Magnetic Scrolls game is also Macced. So's the Pawn. We'll be looking at some other - some of them are pretty stappering



PC: Ultima IV Role-playing games from 16-bit power and RAM capacity. giving them a scope and popularity they never managed to find on 8-bit micros.





ST: Mortville Manor

ters in the game actually talk back to you, but unfortunately their accent makes much of what they say Promises well for the we still haven't been able to

### Pat's Patch

This month Pat gives PAW users the chance to provide automatic exit printing...

The logic of our PAW routine is similar to that used on GAC, but a bit more fiddling is needed! As with GAC, what we have to do is discover whether an exit exists in a particular direction for the current room, and if so, print the relevant message.

#### PAW routine (enter in Process 1)

1.			MES		exits'
			CLEAR	101	
2		SOUTH	COPYFF	38	100
			LET		2
			MOVE	100	
			ADD		101
			NOTZERO		
			MES	'south'	
3.		EAST	COPYFF	38	100
			LET		3
			MOVE	100	
			ADD		101
			NOTZERO		
			MES	'east'	
4.	_		COPYFF		
			LET	33	4
			MOVE		
			ADD		101
			NOTZERO		
			MES 'wes	st'	
5.		NORTH	COPYFF	38	100
			LET	33	5
			MOVE	100	
			ADD		101
			NOTZERO		
			MES	'north'	
6.			ZERO .	101	

Line 1 This line prints the 'visible exits' message, and clears flag 101 for use as an

Lines 2 to 5 Each of these entries covers a possible direction, and all work in The number of the current location (flag 38) is copied into flag 100.

MES

b) Flag 33 holds the current verb, so this line sets the flag to indicate which verb considering (i.e. the number of the conversion noun) c) MOVE 100 looks up the connection table entry for the chosen direction and the

current location. If a connection with another location is found, that location num-ber is placed in flag 100. If no connection is found, zero is placed in flag 100. d) For future use, we want to keep track of the result of MOVE 100 for each direc tion, so ADD 100 101 maintains a running total of the result placed in flag 100.

NOTZERO 100 means that no connection has been found for the direction under consideration. If flag 100 contains any number at all (i.e. is NOTZERO), then movement is possible and PAW looks for the next conduct. If flag 100 contains

zero. PAW drops through to the next entry without printing anything. Thus any connection found from the current room will be printed to the screen. Line 6 At this stage, flag 101 will hold the total of all numbers returned by MOVE 100 for each direction. If no valid connections have been found, nothing will have been added to flag 101, so it will now hold zero. But if any connections have been found, flag 101 will not be zero. If flag 101 is zero, the message 'none' is printed

## Letter from the SHADE

embrace of battle and bar-Micronet's SHADES - the on-line multi-user game where real people get into some truly unreal

Life in Shades is a busy as ever. The 80-column scrolling gateway is finally open, and about time tool Players thus have the choice of playing either the familiar 40 column viewdata format with the blue sky on a red horizon effect, or the faster scrolling format. I personally prefer the scrolling game (when I can get on) which isn't all that easy as there are only a few places available.

situations

A new version of the game has been loaded; the new rooms added puzzles on. This in itself has caused quite a stir, with players complaining that it is too difficult, with too many dangerous mobiles.

The changes looked good, although it was obvious that players had to think harder than was previously necessary. Quite a few players had the new version worked out after a few hours work. But as they have spent such a long time using the same 'reset routine' having to change to a more flexible approach it isn't really suprising that the game is a little daunting at first

#### Wizard blottings

Meanwhile, a popular topic of heated discussion in the Shade has been the number of

#### No Problem!

praise for these tips must go to Darren Hebden, Guy Derham, and M.Hodsman. Don't forget, the more clues everyone sends in for this section, the more help readers will find here

#### Witches Cauldron

Whisky, crushed shell, diamond, sheep's eye makes potion for gorilla transformation. Terrormolinos

Buy a suit with the credit card found under the bench.

get the job in the bank, remember who gave you

#### The steps have to be locked before use.

Lose the bull in the china shop.

#### The lathe retaining bracket, the tweeds and the arty mag are needed on the train to get the se. the se and wear it with the suit when in the club

Adventure Helpline Launch! Check out page 144 for full details...

being more or less equivalent to the FOD (finger of death) in MUD.

Some say that when a player has reached the exalted ranks of the Immortals then they should be able to do virtually anything that they wish. To some extent, wes. they should. However, on Shades, there are a number of restrictions that are placed on the Immortals should not give out large quantities of treasure to mortals

This is understandable. Immortality would be de-valued if mortals could be given as much treasure as they wanted to get to Immortality. However, should an Immortal live in fear of giving out a few hundred points? Well, ves. it would seem so. Not so long ago Zikiag the wizard was blotted for giving Perkins a large amount of treasure. and now Puzi has gone the same way. Who said that it was better to give than ...?

Taurus is, or should I say 'was', one of the latest Immortals, and he is now famed for being the shortest-lived Wizard in Shades history. After making Wizard one morning he accomplished Immortality for a whole day before his actions apparently called for the dreaded blot. I saw Taurus on the game a few days ago, and when asked if he was going to try for Wizard again his reply was simply You betf. Did Taurus deserve blatting? That's not a question that we can answer the Guardians of the wixards/witches and mortals have to abide by those rules

With all these Policemen' about it's enough to make the most stable persona paranoid. But then, just because you're paranoid it doesn't mean that they are not out to get you

If you've any gossip for this column, pull your hat down over your ears, check no-one's listening, then mailbox me on 019998149. Stay Shadey!

Aim the gun before firing. Fire at the Target first then Leave the bus with the balloon

#### Drop the bullseve on the man quarding the border Three weeks in Paradise

Go between arrows marked 'in' and press 'A' to tele-Get the stuffing to get past the bird Get Wilma's handbag to get past the crocodile Jump through the picture to the sea-side.

### Press 'A' to swim up.

Cover the wristband with the shirt to stop Guru laugh Tie the rake and hoe together with the shirt to lever the

Climb over the rocks.

Walk onto sea plug to get to cave

#### The Pilgrim's Player's Guide to Hitchhikers...

ou've arrived in the Heart of Gold, and your first task is to check out the engine room. Take the spare improbability drive to the bridge - if you have trouble activating it, put the small plug in it and the dangly bit (found on the plotter) into the advanced tea substitute (you did check the Nutrimat, didn't you?). Don't drink it unless you want to lose points. You can then activate the drive and pop off to some alternate uni-

The Bugblatter beast requires the towel, or rather you need it. Try popping it over your head if you're having trouble. Don't hesitate to vandalise the memorial and make sure you get the Interface.

Should you find yourself playing Trillian. check out Arthur, get the fluff and put it in the bag. Ford should go to Arthur's house and give him the towel. After you've dealt with Prosser (he must lie down, poor chap) make sure you give Arthur the satchel fluff and get the thumb before the fleet arrives.

Zaphod should ensure he gets the toolbox, small key, and seat cushion fluff before he leaves the boat. The guards will drop their rifles if required, whereupon you can blast them. If you're really clever you'll then use the tea as a Brownian Motion Generator, but this won't help unless you put the flowerpot inside the thing - which will return to you on the Heart of Gold later.

The war room is a doddle, really. Just listen in, get the awl, and make sure you take the particle. You'll then find yourself back in the HOG. You should by now have four pieces of fluff. You haven't? Oh dear. Have you got the jacket fluff, and the seat cushion fluff, the satchel fluff, and the ... but we can't give it all away, can we? Pop the four fluffs in the flowerpot, wait,

then take the pot into the sauna. Eat. enjoy. and stand by for next month's final instalment in which you finish the game Oh, and by the way, don't forget to take a

careful note of the tool. You'll be lost without

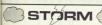
#### Next month...

The Pilg checks out Jack the I

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UNBEATABLE GUARANTEES



## P.O.W.s FLEE

OVER 200 prisoners escape after months of planning and preparation. They used the obsessive time-keeping routines of their captors to their own advantage planning a series of sorties to reconnoitre implements and tools to aid their escape, to find possible routes to freedom and to execute their painstaking plans.





### 1 JUMP AHEAD

EVERYONE has a special friendship but none could be quite as special than that of Head and Heels, the two intergalactic crime-busters who have just returned from

their latest mission in the Castle Blacktooth. "We couldn't have done it without each other" smiled Head. Now you can see for yourself in the their incredibly inventive super-game. You'll marvel at the graphies in this 3D adventure and you'll just scream with delight at all the tricky problems facing Head Over Heels. There's something new around every corner!

## Colour Vanishes

THE evil Zark strikes again to leave our world void of all its glorious colour.

Our only hope now is for the magical powers of Wiz and his fantastic feline friend, Catelite to perform their wonderous deeds indeed, Zzap has already been quoted as stating "the finest release this year".



CHRISTMAS SPECIA

# NE W RELEASE NOW FOR TH



MAVERIO SKIE O U'

TOP Gun has gone through the roof! "Flyim never been so easy - the hard part is winning!" say Gun. On his latest assignment he just couldn't best - flying supersonic and producing aerial manose that would fool a turbo-charged horse fly he quipped - "It's simple, just enter the danger zone!"

## **SCREEN** TEST

Christmas is a-comin' and the software houses are slavering at the prospects of getting their hands on your cash. That's why they're bringing out all the big guns, and that's why we're reviewing more games than ever before in our history. 32 titles get the ACE treatment - and precious few of them are naff. Unless you've got pots of money it's going to be tough choosing between games of the calibre of Nebulus, Stealth Fighter, Bobsleigh, Madballs, Buggy Boy...but help is at hand; the ACE reviewing system is designed to give the clearest possible idea of how good a game is and how long it's going to last you. So look no further for your authoritative Yuletide software guide

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#### THAT REVIEWING SYSTEM

Regular readers will notice some subtle but protound changes this month in the layout of our reviews.

To make our coverage even more thorough, we've introduced separate Predicted Interest Curves and ACE Ratings for all versions of a game, along with separate com-

The main review now tells you how the game is structured and how it plays: the separate boxes let you know how each version rates in terms of Graphics, Sound, 10

You'll also notice that we've dropped the bars giving a readout of these ratings in favour of a simple score out of 10; this was partly because of the pressure on space. partly because some people (no names, no pack drill) complained that they didn't find the box ratings too easy to understand.

We're sure that these tweakings will make the system work even better: it's now cleaser to owners of whatever machine a game is released on just what we think of that version.

99



## **PROJECT STEALTH** FIGHTER

#### MICROPROSE sneak you in to the skies

DESCRIBED as the all-but-invisible aircraft, the F-19 Stealth Fighter is America's latest all-weather reconnaissance and strike fighter.

Having signed all the necessary top secret documents, the player climbs into the cockpit and takes to the skies in an attempt to combat international terrorism. Included in the game are four scenarios: Libva. Per-

#### Gentlemen take polaroids...

people below, then never fear. Project course someone else will view the photions at a later date - but at least your consian Guif. North Cape and Central Europe and there are various missions to be completed within each scenario e.g. the Libva mission could have the player destroying oil wells, oil terminals, S.A.M. (Surface to Air Missile) battery radar bunkers and airbase control towers. Alternatively the player could sneak in and photograph the installations

using the on-board 135mm/IR camera The level of competence of the opposing forces can be decided by the player, from green (unskilled and unsophisticated) to veterans (battlewise). Having decided on, and set the various parameters, the player takes to the sky and views the action from one of three cockpit views - left, right or centre. The centre display is the player's main viewscreen and therefore carries the Head Up Display, (H.U.D.). This gives the player all the necessary fiving information including altitude, velocity, range-changeable radar and a short range map.

The F-19 Stealth Fighter can carry an impressive array of weapons, and before

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#### C64 Version

GRAPHICS 8 IQ FACTOR 8 FUN FACTOR ACE RATING 863



Night flying - It's time to display your skills at doglighting

ASERS may be a standard part of the shoot-em-up author's repertoire. but they rarely play any great part in brain games. That's rather a pity: even though it only scratched the surface with its simple mirror arrangements. Virgin's Rebel showed what absorbing puzzles you could make out

Don't despair, laser tans. Where the Gang of Five didn't quite do the trick for Virain. Vortex's one and only Costa Panavi has come up trumps with this new deflekt-emup. Now you've got multi-direction mirrors, fibre-optic conduits, polarising and refracting blocks to deal with as well as bombs, blobs and some thoroughly infuriating aliens.

It's a simple idea really (though you needn't think that'll save your sanity). Each screen has a laser and a target, and your aim is to connect the two using the optical

#### RELEASE BOX C64/128 £ 9.99cs, £14.99dk SPEC 48k £ 7.99cs

devices to hand. These are mostly mirrors. fixed in position but pivoting so that you can point them more or less whichever way you want. Just use the joystick to move your cursor over the mirror you want to adjust, hold

### DEFLEKTOR cise from VORTEX/GREMLIN

the fire button down, and push left or right to swivel the mirror one way or the other. In addition, different screens have fibre-optic cables - aim a beam into one end and it comes out of the other still going in its original direction - plus automatically rotating mirrors and various other devices which you can use to your advantage.

Before you can construct the beam path. you'll have to clear the screen of blobs. These little devices have been left lying around by aliens, and you only get clear access to the target once you've sapped them all by deflecting the laser so as to hit them. It's tricky work: the aliens also leave bombs lying around, and playing the laser on one of these for too long will blow you to pieces, costing you one of your three lives.

Bombs aren't the only hazards. Many of the screens have walls of absorbing brick, and these can prove dangerous: while you can alance the beam off them if you hit at a shallow enough angle, they'll overload and destroy your laser if you leave the beam playing on them at right angles, Similarly, if

Spectrum Version Coded by Costa himself, and it shows: bright colours and chunky shapes earn this one a big thumbs-up

GRAPHICS IQ FACTOR 4 FUN FACTOR ACE RATING 906



ATARI ST £19,99dk

#### Is it a bird?

Prog one laby, as a minima to both some institution. Ourse give sequence and.

The comprehensive and the compr

each mission the player can decide exactly what armaments he should carry. Despite the vast amount of detail provided in the flight manual and technical supplement the canced its every easy to fig. This is probably due more to Microptose wanting to involve the player in the action side of things rather than accurately re-create the fight controls.

Once you've familiar with the controls and the game, you can start to warry about promotion. Successfully completing a mission can have the player advancing through the ranks toward Bigadaire Geneed, or indeed could result in the player receiving one of four decorations. Thankfully a save option is included so you can fly whenever you're tree.

Project Stealth Fighter is certainly an enjoyable game; there are enough technical details to keep the player involved and certainly enough different and varied missions to keep the player fiving.

Andy Smith



you bounce the beam back down into the laser projector you'll soon get an overload. In either case, or if you take too long and run out of power for the laser, you lose a life.

It all these ways of dying sound easily avoidable to you, you're reckoning without the game's most maddening feature – alliensi These interfecting little menaces don't toke kindly to people arpping their blobs, so they'll scamble your nicely arcomped minrors whenever they get the chance. You can knock them out for a while if you catch them messing with a minror – just put the custor over them and peess fire – but they can do

for you a sight more permanently by setting up an overload or pointing the beam at a bomb. If your ausor's over the other side of the screen it's a mad dash trying to save the situation here, and time's still beling away. The gameplay has a mumber of slightly

unusual touches to it, the main one being the

The hear-finished version we saw was great to look at and listen to, but the Gremin conversion team slaped up rather on the cursor: it gets in the way of the selected mirror, so you can't really see what you're doing when you wwivel it around.

system of lives: you start with these of them for each scene, no matter what. Scrape through a screen by the skin of your teeth and you've still got a fall set of lives for head one pot one abough unsouthed and your bonish! be that much larger. This makes it easy to get through to reach the screen you've currently stuck on, but doesn't provide to much of an incentive to perifical provide to much of an incentive to perifical.

Faccinating stuff that keeps your heart simily in your mouth, Deficitor's got 60 screens of becam-bouncing problems. With some of these being a touch on the easy side that may not give it the longest life imaginable, but it is addictive stuff. Vortex fams, you have not wasted in wain.

Andy Wilton



## 720°

#### Get on board and go with US GOLD



SKATE City is where the action takes place in this skateboard simulation, based on the coin-op of the same name. You and your board must go places. do things and generally accumulate points and what do points make? Prizesi Correct. but don't expect an all-expenses-paid-trip-to-Disneyland. The only prize you'll get is a ticket to the skate park where you can strut your stuff and collect more points.

Before rolling in to Skate City you must decide upon your skill level. Whether you opt for trainee or old hack there's still plenty to avoid. So remember, be careful out there.

The city - an American city (where else would you see body builders, unicyclists and break-dancers on the same street?) - consists

#### RELEASE BOX

	C64/128	£9.99cs, £11.99dk	DEC 87
	SPEC	£8.99cs	OUT NOW
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#### Park performer

Downhill - stick to the slope and you're okay. The easiest of the bunch.

Jump - can be tricky if you don't remember when and where to jump. Ramp - simple, just keep moving. When you

get to the top change direction. Jumping can prove dangerous. Slalom - sharp directional changes are need ed to keep you going through the flags.

of four parks, four shops, streets and inhabitants. The idea is that you roam the streets collecting points and money. Points are gained by jumping, spinning and pulling wheelies - the more exotic your trick, the richer your reward. Hidden locations also clock up welcome points. Certain freebies,

such as dollar bills, add to the bank balance. At the start of the game you have three

#### SpectrumVersion

While skateboarding can be a lot fun once you've got the hang of the controls, 720's graphics slightly take the polish of the game - they're a littie on the indistinct side. The 'killer bees' in particular swarm so closely that they might just as well be called a killer blob. The sound, too, is nothing to write home about.

7 IQ FACTOR 4 FUN FACTOR **ACE RATING 721** 

PREDICTED INTEREST CURVE

Fun - and it's certainly safer than the real thing - but it

tickets, which give you access to the parks. Enter a park and you lose a ticket, but get the chance of performing (see box) and gaining a medal - Gold. Silver or Bronze. Do well and you get a decent 'medal and plenty of points. And as the points arrive so do the tickets (trouble is you need a lot of points to

Money enables you to buy protective equipment from the shops: helmets, shoes, pads, skateboards. You may wonder why you need this gear; well, remember you're on American turf. If you look good and have the goods then you're bound to perform well.

NICK Phipps is not a name that springs immediately to mind when you're asked to think of a top class sportsman. He is

to Olympic standard by sheer auts, skill and

#### RELEASE BOX C64/128 SPEC

Simply learning the controls and win ning the odd race is not enough in this game. The player has to compete and do

AMS



You many get the impression that these is a little to 270. In Sort, these care plenty of obstacles to binder you. If you hang cround to long you are enclosed—inexplicitly—by herema of killer botes, cyclais, motocycy-by herema of killer botes, cyclais, motocycy-by herema of killer botes, cyclais, motocycy-by hereman of killer botes, cyclais, motocycy-ben under you killer y pist cent to be healthy either, and if you get cockry you'll plumpe either, and if you get cockry you'll plumpe either my out port and you get cockry you'll plumpe either my out for you for her you will be proved to the post in the you will be proved to the post in the case of the your shall be proved to the provided the provided the your shall be provided to the provided the your shall be provided to the your shall be your shall be

stup money needed for the teams upikeep. Creshing a bobselight om be disastous not only for your channes of a place in the winning top three but can hurt your wallet as well; repairs cost money but lost sponsorships can have you teetering on the brink of bankruptry – and becoming bankrupt means you'll have to restart the came.

Before you start into serious competition, you can practice each run in whatever order you desire, which is helpful in familiarising the blaver with problem corners etc. You



BOBSLEIC ACE

Ice screaming with
DIGITAL INTEGRATION

combined with having to waggle the joystick of the start of each race (simulates your team running with the bobsingh to the start line) this can have you feeling physically tied at the end of a season.

Bobsleigh is a th

abodileigh is a thrilling game with enough strategy involved to add another dimension to a highly competent and addictive simulation.

• Andy Smith

can then compete against other teams for just the one run which helps to give you an idea of how well you compare to them.

Getting to grips with the runs is as you'd expect, tough it holses a taken eye and sharp reactions to send the corners and find the path of least resistance which you need to follow if you've to achieve carything like the speeds needed to earn yourself or place on the leader board. Make sare you consult the weekling the writing runners for the bold can selecting the writing runners for the bold can selecting the writing runners for the bold can

Options to increase your team's fitness are included, and the idea is to waggle your joystick (or use the keys) as fast as possible:

#### Spectrum Version Fast and furious, you get a real sense of speed

on the Spectrum. All the action is well assimated and controlling your bobbleigh properly takes a fair bill of practice. Sound its used well and adds to the impression that it's just you (and your barm) versus the hard unjecting ice as you thunder down the run. Gropping, nail-bring sulf that is a thrill to play.

GRAPHICS 8 IQ FACTOR 6
AUDIO 8 FUN FACTOR 6
ACE RATING 901

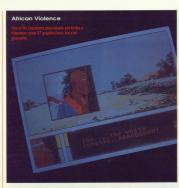




In menu opposis of the Commodore version are if designed and drawn and the music and other ind effects are superb. A shame then that the ne itself is not so hot. You get no real feeling control over the bobblegh - it seems more a in of sit back and watch the action. All the lons are there but it's just not so much fun on CH4 as it is no the Soectrum.

GRAPHICS 5 IQ FACTOR
AUDIO 6 FUN FACTOR
ACE RATING 567





## PASSENGERS ON THE WIND

INFOGRAMES blow in from Africa

DAHOMEY was rather a rough place in the late 18th Century, mes endants. The little West African kingdom had enough horsegrown dangers for meyor people, what with loss on the provil and a very short-tempered autocat on the strone, but when your companions included posseners, lunctics and slavers – well, you seally did have to watch your see.

Yes folks, we're back with Isa and Mary, the control characters of Passencess on the

the central characters of Passengers on the

#### -----

RELEASE BOX			
C64/428	£12.95cs, £14.95dk	REVIEWED	
ATARI ST	£19.95dk	REVIEWED	
AMS	£12.95cs, £14.95dk	REVIEWED	
IBM PC	£24.95dk	IMMINENT	
AMIGA	£29.95dk	IMMINENT	

Wind, Based on a classic French comic strip, the original game related a talle of intrigue and high adventure at sea with a graphic style that amused British players and a game structure that left them battled. Parsengers II takes up the story, and the strange gamepling style, in Adriac.

The flat some opens with one of the games many beauth scores, depicting the Dehmey village where King Kyenge holds on audience to lise and the companions. In these your job to try and help the help the second of the companions chanceles in a small window below the man picture, and claiding on them with the point by welling one of the game's numerous chanceless in a small window below the man picture, and claiding on them with the pointer to make them speck. These carries of the consonality and of number of what they say "..." In modify just of number of concept's to downers the just of the picture o

As well as assembling dialogues in this way you can affect the plot directly by click-

#### Atari ST Version

The gameplay is effectively the same on all machines, but for colour and graphic resolution this is the best of the bunch (until the Amiga version turns up, at any rate) – and very rice it looks too.

GRAPHICS 10 IQ FACTOR
AUDIO 5 FUN FACTOR
ACE RATING 678

#### CPC Version

The CPC can't match the ST for graphics of course, but it comes pleasantly close here thanks to careful use of colour. The tape version's multiload can get a little redious, and the lack of a mouse makes control a little relumou.

GRAPHICS 9 IQ FACTOR
AUDIO 7 FUN FACTOR
ACE RATING 665

#### C64 Version

Graphically the poorest of the versions (though still a good-looking game) and also, of course, the

GRAPHICS 8 IQ FACTOR
AUDIO 7 FUN FACTOR
ACE RATING 659

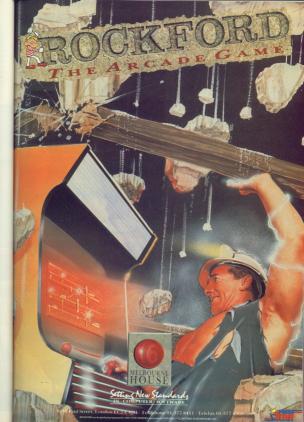
ing on different parts of the main picture, seltrag action sequences in motion You've never really controlling the proceedings in old this—just receding a fixed story line. The actions are shown as parests overlaying the main picture, writher than as conventional crimation. There's really any indication of where these seguences are possible, so you'll probably end up clicking ident' background on anytull of or the time just on the off

chance. Somewhere between a story and a spsore putale (and a long way from mything youth normally call a gramer). Researches 18 every much the comic stip equandent of Correnanceae. It is easily the equal of Corpresentation of the control of the conmercents gameging shartcomings are also in evidence—with a largety shartcoming are also a game, but Passenger 18 that have been deducted what charges it might have the start largety shartcoming of the shart largety shartcoming.

Andy Wilton



ind gameplay they all have a sin e initial fascination wears off.



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Fivents are about expension. The Pool Joust, Downhill Race, Freestyle Ramp, High Jump and the Downhill Jam. Play alone, with a friend or pit your skills against Lester. Skate or die - it may be fun but its serious.

#### SMOKIN' THE HALF PIPE

Roar down the ramp and fly up the other side. Live on the edge where you go for rock in role, hand plants (shown here), leg plants, raidsides, even methods. Set airborne for 720's, ollies, front & backside serials, and tweaks.



#### SKATE & DESTROY

Karate chop your way down the baddest alley in the neighborhood. Smash up trash cass, bottles, fences, and the other guy, Rad skaters ramp off the cop car.



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-I

BRAVE new game formats are rare things these days, and difficult to come up with too. That must make programmer John Phillips a pretty hot property: after the unusual true 3D and sideways motion of Impossaball, he's just delivered this

strikingly unusual rotary masterpiece. The basics of the game are simple stuff indeed: eight cylindrical towers project from the ocean, and you have to destroy them. To do this you must guide your little character ledges the game keeps him in full view by rotating the tower behind him, platforms and all. This 'totary scroll' is dazzlingly original stuff even on small movements, but Nebulus can do better: if Pogo steps into a tunnel, the tower spins through 180 degrees to show him popping out the other side.

Graphic ingenuity isn't enough by itself of course, but you'll find that the gameplay too is solid stuff. Though based on conventional timing and jumping problems, Nebuted for each tower, but a few falls soon eat this up and running out will cost you a life.

With practice you can get past (or shoot) the towers' nasties fairly reliably - though the timing can be very demanding in places, especially on the Spectrum version but that still leaves you with airborne badguys to deal with. These fiying nasties turn simple problems into death-traps if they appear at the wrong moment. Waiting on lifts or dodging into tunnels can save your bacon here, but you'll need to plan ahead a

Nebulus strikes a fine balance between trustration and addiction, and should keep you occupied for months even with only eight towers to climb. Add in the flair and originality of that rotary scroll and you've got a good-looking, playable winner of a game.

Andy Wilton

## **NEBULUS**

#### Towering originality from HEWSOI

Pogo to the top of each tower, causing it to telescope down into the sea. A spiral of platforms, ledges and lifts form your route up the cutside of the tower wall, along with several tunnels directly through the tower's axis. It's

no picnic: gaps between (and disappearing blocks in the middle of) ledges have to be jumped, and nasties in your path need shooting or

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dodging. These immediate problems will have to wait for the first few games, because the chances are vou'll just be staring at the screen in wonder. As soon as Pogo starts to move, you'll be struck by the startlingly odd way Nebulus handles his movement around or through the tower. As he walks along

lus has subtle twists to it that make for real addiction. For one thing, most nasties don't kill you outright: they merely knock you off your ledge. lift or whatever. If you've still tairly low down the tower (or just unlucky) you'll

fall into the water and drown, losing one of your three

Once you've climbed to a decent height the worst you. have to fear is a

tumble onto a lower platform forcing you to cover the same ground again - but this is quite bad enough. You scale each tower against a time limit, so the delay involved in climbing back up can cost you dear as well as drive you wild with frustration. There's a certain amount of slack in the time allot-

#### C64 Version

Bright, smooth and fast-moving, the C64 Nebulus is a joy to behold as well as to play. There's an extra between-levels sequence where just icing on the cake: the main game's good enough not to need it.

GRAPHICS 9 IQ FACTOR 7 FUN FACTOR ACE RATING 943

#### Spectrum Version

Though it obviously can't match the C64 version for colour or sound, the Spectrum Nebulus is very nearly as fast and every bit as addictive. No fish to catch between levels, but it is still a cracker of

GRAPHICS 8 IQ FACTOR AUDIO 4 FUN FACTOR ACE RATING 917







## SKATE OR DIE

Ollies and plants with ELECTRONIC ARTS

PACK your pads, board and wheel grease and head on down to Rodney's skate shop. There you'll meet the coclest has-been in town - Rodney, of course. He sure knows how to handle his board. Can you say as much? If not, you'd better head for your local rag store and purchase Psycho Skateboards Daily, otherwise you'll end up as another pretty pattern on a board. Enter the mean city; skate or die.

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Wilton

If you intend leaving your mark on the city then sign in at Rod's shack. There's room for you and seven other competitors. Then it's either a practice roll round town or a head-to-head in five gruelling events. You're safer to stick to practise mode: after all you'd look a ripe prune if you hit the streets with a



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pink board and no hope of changing your image until five events later. Leave Roddy's parlour and cruise around six spray-painted streets; skate down

the one with the event of your choice scrawled over it. The fun starts. The first event - if you choose to compete

in all five - is the Preestyle Ramp (a hundred feet of wood and steel moulded into a wide U-shape). Jump on your board and strut your stuff; ollies. Rockn-Rollers and kickturns if you're hip ( and if you con't figure out what they are, look at the

Skater Speak box). But if you're really cool you'll also manage an open eve for the Betties. Try to be too flash and you will crash through the ramp - not a pretty sight.

Skater Speak

Next on the list is the High Jump: another U-shape ramp. Only this time you've got

to waggle fast and hard to get you and yourboard tens of feet in the air. A mean tournament, especially if you tump at the wrong moment. Nothing is out to stop you in the third

contest. It's just a casual jount in the Downhill Race: a race against time. On the way to the finish line you can ao on, over, through and along objects. Stay on your board and gain a shower of points

It's you against an opponent in an hilarious, mad dash to the finish line in the Downhill

Jam. Anything goes: ride over flower pots, smash bottles and tip over trash cans. While doing this you must try and unbalance the other party by booting him in the head. stomach or other painful regions of the body. But also take care you don't slam into buildings or thunder through fenges (you'll end up guartered if you do).

The last event, Pool Joust - in which two players enter, but only one comes out alive is simple: one person moves rapidly round the rink trying to dodge the other stick-brandishing thug. If the first player manages to get from one side of the ring to the other, four times, without being hit then the stick is his This corries on until someone gets splattered. Skate or Die is highly entertaining and varied. The graphics and animation are

exquisitely detailed; and the characters look in great pain when you do something wrong. By far the best in the recent skateboard game craze.

Richard Monteiro

### C64 Version

GRAPHICS 9 IQ FACTOR AUDIO 7 FUN FACTOR ACE RATING 878



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#### STATE OF ACTION



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STATE OF ACTION

RAMMING a spaceship into objects in order to change its direction isn't generally considered a good idea. However, in this latest from Tony

Crowther it's positively essential to go bouncing off things like a flea in a pinball machine.

The 'awesome' Matrix of Zog is where all the bone-jarring collisions take place, as you search for the eight crystals of Zog hidden in the 1,400 screens. At its simplest that's what the

game is – just a matter of exploring and collecting. What makes it interesting is the weird way you get around and the many strange features encountered on the way. You can fly left and right in a corridor and after height as well, but you can't turn around or turn a corner without some assistance. Triangular blocks are placed at many junctions and by ram-

ming them you can after the disection of the ship through 90 or 180 degrees, depending on whether you hit the angled or flat part of the block. Ramming walls will also turn you around. Neither action causes any damage to

the ship.

The corridors are populated by several breeds of nasty aliens. Homes home in on you, while attracters draw you towards them instead. There are also bouncers, drifters,

#### C64 Version

A tongue in cheek list of credits done move st start things off, accompanied by some bop-air Crowther music. The graphics are OK but there is anything spectacular, although the scrolling is w neat. Sound effects are limited to blassing and exp

GRAPHICS 7 IQ FACTOR 5
AUDIO 6 FUN FACTOR 6
ACE RATING 783

RELEASE BOX

C64/128 £9.95cs, £12.95dk REVIEWED

## ZIGZAG

#### Ducking and diving with MIRRORSOFT

The matrix is viewed from a Zaxxon-type perspective, scrolling diagonally to keep the stap centred on the screen. The matrix is entirely composed of comidos connected by right-angled runnings. In places the comidos narrow and harve ramps forcing the stap unweads.

corkscrews and cubes to look out for. Most of these guys can be deadly if rammed or if they hit you with their missiles. If you do die then you're returned to the starting position.

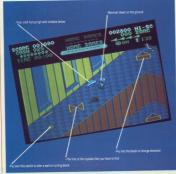
Shooting the aliens earns money which can then be spent if you find a shop zone. They're found at the end of cul-de-sacs and when you fly into them it presents a menu of additional seatures for the ship. Each seature costs a varying amount of money, from Uhums at the cheapest level to extra lives of the most expensive. Other powers are apply, maps, missiles, shield, ruise, intra-ord and x-

The maps show the zone you're in, infrared and x-ray respectively enhance vision and allow you to see through walls. All the powers are useful to one extent or another but are lost if you die.

Other features which add to the puzzle nature of the game are switches that aced are remove wells and blocks when flown over or shot. Additional restart points can also be found to prevent you having to fly all the way back from the start.

At first the concept is very intriguing particularly as the forchuse and their uses are discovered. But it quarkly becomes a matter of exploration and supping rather than one of puzzling. It's containly a massive task to find all eight crystals and it's going to be a monster to map, but it may not hold enough surprises in the long run.

Bob Wat





# THROUGH THE TRAP DOOR

#### Cartoon capers from PIRANHA

BERK and Drutt, the two cartoon cuddlies. Trapdoor had you controlling the wonderfully animated Berk in the dingy corridors of the Bad Tempered Thing's castle. The sequel

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not only lets you manhandle larger-than-life Berk, but also his bouncing buddy Drutt. The adventure starts when hapless Boni (the skull) gets plucked from his abode, and subsequently taken to an underworld by a headless bat. Both Berk and Drutt must travel through four underground regions to recover

You have 16 lives with which to hunt for Boni. It sounds like a lot, but there

are many hazards and you lose a life roughly every 90 seconds. Berk, the large blue thingamiwatsit, is the main character. Drutt just bounces around satisfying his craving for worms and occasionally, with great trepidation, gets Berk out at a hot spot.

The four regions are traught with dangers and puzzles. There are pits, icides, bats, and other menaces to dodge. The task usually involves locating a key and taking it to the nearest door - it is in this manner that you pass to the next stage.

As with the original, the

#### SpectrumVersion

There's some tremendous animation to the large carmore than the odd pleasing effect, but this doesn't really detract from the fun or the enjoyably tricky

8 IQ FACTOR 5 FUN FACTOR **ACE RATING 824** 

graphics are bold and superbly animated Berk's facial expressions have to be seen to be believed. And Drutt, who insists on gobbling every passing worm, is cute in his own special way. The tasks are harder than the original, but could still do with a little tweaking. A game worth getting if only to watch the big, bumbling characters.

Richard Monteiro



Berk and Drutt look on as the headless but takes Boni off to the lower regions.

C64

# WEREWOLVES OF LONDON

#### Fancy a bite of VIZ DESIGN's latest?

WEREWOLVES features sound effects which include that catchy song of the same name by Warren

work it out for yourself format, but basically



other aspect of the program which might It's presented on the 'no instructions -

> you must explore London, collecting potentially useful objects which will enable fou to open manhole covers, or shine a light as you roam the sewers. By night you transform into a werewalf and attempt to keep your levels up by attacking people.

As far as gameplay goes, there's an awful lot of trotting about screens which all look exactly the same. The objects may be useful in the end, but at first you need to work out what they are - a swiss roll, electric toothbrush? - as the araphand animation perfunctory.

Christina Erskine

#### RELEASE BOX

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#### Amstrad Version

Despite the nice touches - eating Sloanes can be good fun - Werewolves just doesn't have the death or the interest to make the grade

#### IQ FACTOR 7 FUN FACTOR ACE RATING 573





# **MADBALLS**

#### Battling balls bounce in from OCEAN

MERGER, compromise, elections and voting are unknown terms on the planet of Orb. If you want political power then you're going to have to get out there

and bash a few balls ground to get it. Aft all, vou're a Madbo and that's what you

As in all politic

	RELEASE BO	XC
C64/128	£8.95cs, £12.95dk	REVIEW
SPEC	£7.95cs	MMINE
AMS	£8.95cs, £14.95dk	MMNE

struciales there's mo than one candidate ! the post of leader.

There are seven other Madballs doing an excellent impression of the SDP leadership struggle, as well as a pack of Beaurocrats Madball Roll Call

doing a tiresomely good job of getting in the way and generally fouling things up for you The surface of Orb is a brown complex of

interlinked platforms, surrounded by a sea of grey conformity. The scrolling view is from overhead, so the balls get larger and smaller, as they bounce up and down. The Madball

sprites are recognisable mainly by their colours, but the facial features aren't quite distinctive enough to dif-

ferentiate them. Initially you are in control of Dust Brain. a mid-range Madball in terms of speed and strength. The other seven MB's (Member of Ball-iment) have equally flattering names like Swine Sucker, Slobulus and Freeky Pullback. They have different speed and strength ratings which affect their manouverability and performance in combat

A spinning pole (opinion poll?) indicates a ball's energy level, which is supplemented by bouncing on items of garbage that pass for food on Orb. Running out of energy won't kill the ball but it does make him more vul-

To capture another ball you simply have to bump him off the platform and into the arey area - the goal. You can do the same to the beautocrats for points. Once a madball is captured you can switch control to it

at open dustbins. It will also come into play if you get bounced into the goal, acting as an extra life

There are several areas in the game, and only one ball will be found in each. The creas are connected by vawning holes which you can bounce down, exiting into the next area via a dustbin

To bring some variety to this tough political lobbying there are many features that affect the ball. Trampolines, springboards tyres and catapults can all give you extra bounce to clear gaps, but using them directionally is often difficult. Ramps, pyramids, dusthins and all slicks can send you spinning off course and into danger

One cute and totally inexplicable feature is the fried eggs, which, when bounced on, release chickens who can be squashed for bonus points. Bubbles come in for similar treatment with the same bonus points result. However, whatever you do, don't bounce on the mousetraps or your political career will deflate faster than Cecil Parkinson's The gameplay is absolutely manic as

you find yourself fighting the joystick the whole time trying to stay in play or bounce an opponent out. This makes it addictive and infuriating, a deadly combination because you keep having one more go and get more trustrated every time you die. Something has to give eventually - the joystick, the game, your mind...

The main drawback is the element of trustration at dying and having to repeat conquests of the other balls. It's not a serious problem, but along with the drab graphics it takes the edge off the game. I conclude that there is only one difference between Earth and Orb politics - one has party political broadcasts that put you to sleep, the other will give you many sleepless nights

Boh Wade

#### C64 Version

GRAPHICS IO FACTOR FUN FACTOR ACE RATING 826



#### 74 Advanced Computer Entertainment

## AIRBORNE RANGER

#### Hit the silk MICROPROSE style

#### C64 Version

lay 1

s on The

> the gameplay is tough to get to grips with but does become easier with practice. The ability to save positions and character qualities means you can volunteer to fight a campaign and hope to get your character promoted to Colonel. You'll find yourself in some pretty tight spots which require a quick trigger finger, while at other times you'll need to think on your feet and work out your plans very precisely.

8 IQ FACTOR FUN FACTOR ACE RATING 801



#### HAVE you ever tancied yourself as an enemy lines for the U.S.A ? It so, then now's

Microprose will fiv you into enemy territory where you can parachute behind enemy lines and attempt to complete a number of hazardous missions varying from capturing enemy officers to cutting enemy gas supplies

The general idea is to fly over enemy territory, drop supply pods that you may need during the operation, then when the light turns green, launch yourself from the aircraft and guide your parachute to the ground. This part of the game is viewed directly from above and only lasts a few minutes, but once you touchdown the view changes to show your ranger in the middle of a screen

	RELEASE BO	ox
C64/128	£14.95cs, £19.95k	OUT NOW
SPEC	UNDECIDED	FEB 88
AMS	UNDECIDED	FEB 88
ATARI ST	UNDECIDED	FEB 88

#### Action Man!



Crawling through trenches under fire from m ments is not everyone's idea of fun. Good job it's only a simulation.

which scrolls around him as he runs, walks and arawls on his mission.

From here on in it's up to the player to complete the mission and make his way to the pick-up point to be rescued. Of course the enemy have been alerted and will be hunting you down, so guick reactions are needed in order to survive. Controlling the character involves maving him in one of eight directions, while he can fire in any one of 32 directions with a choice of weapons. Replenishments are available - if you can even reach the supply pods

Airborne Ranger is not one of those instantly playable Commando-style jobs, but a game which takes a while before the fun begins to shine through. When you do get the hang of it, it can become a gripping and demanding task.

Andy Smith

#### INFOGRAMES dodge the black holes

NAVIGATING the space lanes and shooting the occasional gun turret may sound like boring stuff, especially where the lanes in question are flat or tubular lattices of obling tiles. But when large holes and other lethal obstacles are the rule rather than the exception - and you can't slow down to avoid them - baredom is unlikely to be one of your problems.

Frustration, on the other hand, gertainly will be. The only way to stay alive in the game is by dodging from one row of rectangles to another as the whole lattice zooms towards you. The vectors here are slick and the feel of movement is mostly convincing. but the strict pilot's eye view - your ship isn't visible on the screen - causes a few problems judging where your ship actually is

Teiling which row you're on is easy - the lattice rotates or moves sideways under you as you push left or right on the stick so as to keep you central - but telling how far you've got along the tile you're on is another matter. Swing left or right before there's a tile alongside you and you're dead. Run off the end of a tile into blank space because you waited too long and again you're dead. The timing isn't actually too tight, but you've got an awful lot of steering to do and you're back to the start of the level every time you die. Since you've only got three lives anyway, this clearly isn't going to be a picnic

There are other hazards aside from blank space: purple tiles and lashing tiles kill you outright, as do grun turrets if you ram them: light blue tiles and shots from an turrets drain your energy; and green tiles send you out of control for a few precious seconds. It's not enough to dodge these though - you've also got to positively seek out the crange tiles that top your energy up.

Later features add complications - black



while going for then

holes are particularly nasty - but the overall game remains simple, addictive fun

Andy Wilton

## PELEASE BOX

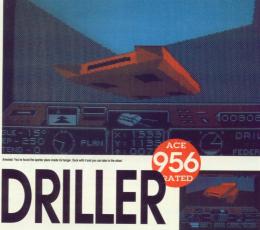
## ATARI ST £19.95dk

#### Atari ST Version Nice vector graphics, if not exactly smooth, The flashing squares are almost impossible to make out.

but that's right in keeping with such an irritatingly playable game. 8 IQ FACTOR

7 FUN FACTOR ACE RATING 887





#### Solid exploration from INCENTIVE

AMS

GAS build-ups are no laughing matter - not when they're threatening to blow up one of your home planet's moons, at any rate. The debris from the explosion would make rather a hole in everybody's lifestyle, so you've got to get up there and prevent that big bang by setting up drilling rigs and siphoning off the gas. It's a race against time to find the gas pockets, and there's a lot you'll have to work out for yourself

The playing area isn't the actual lunar surface - that's far too hostile an environment even for your heavily armoured excavation probe - but rather it's an artificial structure built around, and almost encasing. the moon itself. This structure consists of 18 square sections joined at the edges, but there are still holes you can fall through so you'll have to watch your step

As you explore the buildings and objects to be found in each section your driver's-eye view of them is in true perspective 3D. with solid colour or texture-filling used on all surfaces. Especially where textures are used, it's not always entirely clear what distant or small objects actually are. The solution's simple here: just trundle up to them and take a look. Tiny dots become cubes or pyramids on closer inspection, and seemingly connected buildings turn out to have narrow - but navigable - alleyways in between

#### RELEASE BOX C64/128 £14.95cs, £17.95dk SPEC £14.95cs, £17.95k £14.95cs, £17.95dk

At first you'll simply want to explore the moon. This is a tough enough task to be getting on with: though there are obvious doorways to adjoining sections or into buildings right from the word go, you'll need to find or create others. There's more to this than trundling around and looking: you'll also have to identify various switches, and shoot them with your laser cannons to trip them.

Amstrad: You're in the jet now, looking back at the excavation probe

Often switches don't directly create the results you want: some work in groups so you'll have to set all the switches correctly before anything useful happens, while others simply reveal further switches that were previously invisible. There are no general princi-

ples here - just shoot and observe As you might already have guessed, you cren't the only one who gets to do some shooting. The moon's abandoned security system is still in working order, and its static laser turrets can subject you to withering fire If you stray into their field of view. Fire back and you may knock them out or at least impair them before they drain your shield and destroy you, but some turrets are cannon-proof. You may have to search for another route through here, or simply grit your teeth and run the gauntlet.

Turrets aren't the only hazard at that. An orbiting killer satellite will fire down on you if if gets the chance, while minefields and acid rivers make some routes decidedly dangerous. Large drops can wreck your probe even if they don't plunge you onto the moon





CS4: Not a finished version, but these graphics should give you an idea of what to expect.

below, so simple trenches can't be taken lightly either.

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Once you've explored the moon, with the help of the energy and shield crystals around the place, you still have to address the central problem of venting the gas. Positioning drilling rigs is child's play - just telepress of a key - but you have to know where the gas pockets are. The landscape contains all the information you need, but much of it is in cryptic form - symbols on the ground messages on walls etc - so you'll need to

#### **Amstrad Version** Hard to believe you're only looking at a CPC display.

what with the realism this one wrings out of it in places. It may take its time updating the screen, but it's worth the wait.

4 FUN FACTOR ACE RATING 956

have your brain in gear

The realism of the Driller playing area lies not just in the solid 3D graphics used to depict it, but also in the very adventure-like way you can think things up, do them and find they work. There's so much to do beyond the normal: if you find the switch to get the moon's teleport network running, can you work out how to trip it? If you find a spotter plane to fly around in, can you keep it air-

Fitting Driller into a pigeonhole is tricky. There are arcade, adventure and logical

#### SpectrumVersion It may only be in mono, but the textures used in the

display are still very effective and the screen redraws at a healthy speed making the game that much more playable.

GRAPHICS 8 IQ FACTOR 3 FUN FACTOR ACE RATING 931







A well defended building - that white pyramid is a gun turret covering the entrance, and shooting it won't get you anywhere. 2 Let's head round the back. Maybe there's a rear way in... 3 ...or maybe those power lines have got something to do with it.

puzzling elements to the gameplay, while the slow-but-impressive graphics hang some where between Starstrike II and The Sentinel. It's bold, dazzlingly original and very playable too, and it deserves to feature prominently in the Yuletide charts.

Andy Wilton



The Amstrad's colours give it more instant appeal, but th versions will enthrall you once you start to

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TEMPLE OF DOOM



CBM 64/128 £9.99t £14.99d Amstrad £9.99t £14.99d **ATARI** Spectrum 48/128K £8.99t

GAMES



SCREEN SHOT FROM ARCADE VERSION



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Coming early 1988 HALLS OF KYROS (SEGA), ROLLING THUNDER (NAMCO) ROADBLASTERS (ATARI GAMES)

HEROMPANIES EVEN BOTHER...

# BUGGY BOY

Are ELITE buggin' you?

FORGET the Ferrari - Buggy Boy puts the player behind the wheel of an off-road, race-tuned Baja Buggy.

The game is viewed from a position behind and slightly above the buggy. The gim is to complete one of five courses by completing the various legs that make them up. The roadway scrolls towards the player, continually twisting and turning so that the player has to move the joystick to avoid the various obstacles. Of course, you're racing against the clock on each lea - much like Out Run - and failure to reach the check

RELEASE BOX

C64/128 £9.95cs, £14.95dk

SPEC

AMS

ATARI ST £19.95dk

player has to fight to avoid a plethora of road-side and on-road obstacles including Buggy Boy - what's

point means it's time

Besides the almost oblig

So you thought Out Run was the definitive car racing game and anything that bears even a poor substitute? See Buggy Boy and then decide. Sure, the idea of completing several stages within a time limit appears in both games but that's where the similarity ends. Buggy Boy is far more concerned with picking your course and avoiding the obstacles than merely completing a course. In Out Run, you had cars to avoid, but Buggy Boy has the player risking far more in an attempt to drive through bonus gates; this can prove to be tricky until you get to know the course and will have the player running into an immovable object on more than one occasion simply because his greed for points has overridden

The inclusion of on-road obstacles is also a cause for concern. Hit a log and the buggy goes fiving through the air - great fun to watch but should it happen on a corner then you could be in for a lot of trouble, because you can't steer a car that's in mid-air. Buggy Boy is different enough to merit a high level of interest from even the most ardent Out Run

trees, brick walls, fences and the occasional other buggy. Hitting an obstacle will have your buggy leaping into the air and coming down with a thud - you then have to pull away from a standstill and try to get your speed back up again before you lose too many valuable seconds. As well as crashing the player can also witness his buggy fiving through the air whenever he hits a bump and going up onto two wheels whenever he hits a molehill or a tree stump - this two wheel business is actually quite helpful for steering for through tight gaps

Almost as an afterthought, the player can attempt to increase his score by driving

#### C64 Version Although the scrolling is a bit poor, the graphics are very colourful and well drawn. Sound is great - throb-

bing engines throughout. It's not cerebral stuff, though memorising the courses can help. It's certainly instantly playable and very addictive, with the variety of course and legs providing much lasting interest.

7 IQ FACTOR 8 FUN FACTOR ACE RATING 906

PSST! Wanna see the world? Go to all the best airports? Get about on all the best railways? Give yourself a chance of picking up at least £5 000? And play a jolly entertaining quiz game at the same time?

Then look - as they say - no further; The Travel Game will be right up your street. The ultimate object of the game is to solve an Endaame Puzzle' aet this right and vou stand a chance of winning that prize — £5K plus £1 per copy of the program sold. However, you only stand a chance of getting the pieces of the endgame puzzle by travelling the world to the right places

And, of course, you can only go places by buying tickets. In The Travel Game you earn the money you need by answering questions, which is where the quiz element comes in Describing the first steps in the game is probably the best way of giving an idea of what ages on.

# Oh Boy! 1 4932

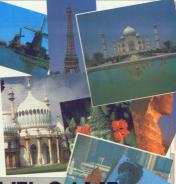
You begin in London with a clue to the first destination you must reach: a musical clue. When you've figured out that this place is Dublin you then have to get there. You have to go to a travel agent's, buy a ticket and get to the girport (in time).

When you reach Dublin (or anywhere else, come to that) you should go to a shop and buy a souvenir. If you're lucky you'll be given a question which - if answered correctly - will give you a part of the endgame

the buggy through various gates and over a number of flags. Also included are time gates that give you a two second bonus for the second leg. Buggy Boy is non-stop action that is fun.

to play; and it's difficult enough to keep even the best drivers engrossed for guite some

PREDICTED INTEREST CURVE tant fun. Once you've learnt the different courses you o



# THE TRAVEL GAME

## Peripatetic perplexity by RULEFORMAT

puzzle. Entering 'Display destination' will give you a clue to the next stop you must make The destination clues are generally name too difficult to work out: what can be tricky is actually getting there. The logistics of getting from A to B (very often via D Q or even X) are a large part of the fun and the frustration

The other part of the fun comes from earning the money wherewith to voyage. can bring you large amounts of cash. Getting it wrong means you lose your stake. There's a wide variety of questions, ranging from logical/mathematical puzzles through word squares and recognising quotations. The cheaper ones can be fairly easy, the expensive ones fiendishly difficult

You need to accumulate money in order to travel - tickets from Paris to the Middle East don't come cheap. But, you may well be cash? Bea. It's demeaning to wander round Paddington station trying to raise the cash to buy a cheap question, but it's the only way and it does work: eventually you get enough to start trying to accumulate more cash.

There are numerous pitialis in The Trave Game. As well as blowing all your money you can get stuck in traffic jams - so missing trains ands losing valuable time, and forcing you to stay in overnight hotels. In certain locations you will bitterly regret corrying your stash in cash rather than travellers'

cheques: it's not pleasant to be mugged and left penniless on the streets of an alien city. The overall object of the game, of course is to collect and answer all parts of the Endgame puzzle and give yourself a chance of winning the £5,000. But on the way you

can have plenty of tun playing the quiz elements and just getting around. The Travel IBM PC Version

#### Don't buy the game if pretty graphics are what you

want: there are none. The Travel Game is all about interface could have been a little friendlier, but once you get used to it it's not too much of a problem.

0 IQ FACTOR 5 FUN FACTOR 9 ACE RATING 838

whether played on your own or as part of a syndicate. Remember, though, that only one prize entry per disk can be submitted.

Game can become en

Pete Connor

PREDICTED INTEREST CURVE

Will really keep you hooked until you solve it - or win

C64/128 £9.99cs, £11.99dk

SPEC £8.99cs

AMS

# **BRAVESTARR**

#### GO! west young man

FRONTIER planets like New Texas attract some pretty lowlife types, so local lawman Marshal Bravestarr (that's you) has his work out out for him. That goes double right now, with the wise old Shaman held prisoner by evil Tex Hex and his gang. It's curtains for the Lone Star planet

RELEASE BOX

£9.99s, £14.99dk

if you can't rescue Shaman, so you'd better get onto Hex's trail muy pronto You can run up and down the town's scrolling, side view main street fighting off

bad guys with your trusty six-shooter, or drop

into any of the town's named locations - the

jail, bar or bank for instance - in search of

information. Once you're inside a menu sys-

tem lets you examine the place or talk to

DEC 87

**OUT NOW** 

anyone there. The bar's your best bet for info, but you'll need money there - and for that you'll have to head out of town.

Climbing aboard your flying saddle, you can select your destination from the onscreen map and take to the skies. At first there's only one out-of-town location, but as you talk to

Marshal B's in a ghost town, searching for the Hex gang: that's him standing on the root. people and gather clues the map starts to fill

in. You'll have to blast your way through the tumbleweeds and other airborne nasties that swarm at you, and when you arrive it's

Christon 3 in an attempt to save your Space

player selecting a sector to explore before

your bottins and should be rescued and Having rid the sector of aliens it's then

monly known as The Tube. Here your ship

alien invasion.

another round of talk-and-examine.

There's an overall time limit to the game. and the clock can run down quite quickly if you keep taking serious hits. Tokens left behind by dead nasties can increase your rate of fire or even stop the clock briefly, but avoiding the bad guys is far too difficult Bravestarr's a valiant effort at something

Andy Wilton

#### SpectrumVersion Nice use of colour and not too much attribute clash

either, But the gameplay's frustrating stuff. 7 IQ FACTOR

4 FUN FACTOR ACE RATING 775 PREDICTED INTEREST CURVE



# R.I.S.K.

#### Scroll and shoot to THE EDGE

RAPID Intercept. Seek and Kill - just in case you were wondering what the initials stood for. Jump in your skimmer

RELEASE BOX £8.95cs, £12.95dk OUT NOW



scrolls continually from left to right and the flying skill and your thirst for supplies, the form you pass. Rescue some boffins and retrieve some

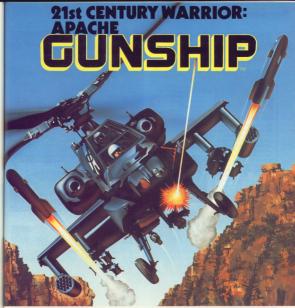
to your ship - a life of fighting aliens then

becomes easier to live. R.I.S.K. is sufficiently different from yer average scrolling shoot 'em

#### C64 Version

8 IQ FACTOR FUN FACTOR ACE RATING 709





The Apache . . . Fierce and elusive, like its warrior namesake . . . Capable of defeating enemy tanks, infantry, and hostile aircraft on the modern electronic battlefield.

Gunship's revolutionary 3-0 graphics enable you, the pilot to fly into the worlds hottest trouble spots ... You'll use an unbelievable array of high tech information and weapon systems, including lasers, video cameras, night viewers, radar warnings, jammers, computers, missiles, rockets, flares and a 30mm cannon! Successful missions will be rewarded with medals and rank promotions. GUNSHIP is available for the CBM 64/128K, Spectrum and coming soon for IBM PC and compatibles.

MICRO PROSE

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Please send	copy/ies of Gunship CBM 64/128  Cassette £14.95  Disk £19.9
Spectrum Cassette £9.95 Disk £12	95 ☐ Further details.
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## **AGENT X2**

#### MAD pop the pimple



ZITS are what this simple but cleverly executed shoot-em-up is all about; one of the many mad professors who abound in computer games is about to unsuspecting world: your task as Agent X is to stop us all from

breaking out in terminal acne. The game is a 3-parter: the first is a horizontally scrolling blast, the second a vertically scrolling one and the third is where you bust through a wall to get at the mad prof himself. It's very nicely done, but

does tend a little toward the repetitive - with the addition of sound track you can find yourself drifting off in to a zombie-like shoot-em-up trance. Graphics, too, are sweet, if unexceptional.

Pete Connor





## **HYBERBLOB**

#### Blob minding with FIREBIRD

**BLOBPODS** are among the most

of a row of cubes to the other. Unfortunately, there are caps in

start any too easy - there's a lot

Pete Connor





## **ACTION FORCE**

#### Join VIRGIN and shoot Cobra

VIRGIN'S Gang deservedly high is unlikely to be

the skies in order to protect a C5-

Christina Erskine



**ACTION** FOR CE



## **GUNBOAT**

#### PIRANHA mess about in boats

SPLASH band wallop, is the order of the day in this watery shootem-up. Get out on the river in your hunterkiller and shoot everything in an attempt to penetrate the



inland waterways held by the enemy'. You can fire missiles, torpedoes, shells or drop depth charges - which accounts for just about every type of enemy you'll encounter There's a choice of routes to

take, but wherever you ao pretty tough - so tough thats it's pretty hard to even get going at the start of the game. The rather drab and old-fashioned graphics on this C64 version don't help much.

Pete Connor





WELL, here's a turn up not use and only a here's a turn up for the books - a pretty face, but packs a powerful and addictive punch of gameplay as well. Hitherto we've seen lots of programs showing off their dazzling cartoon-style graphics, but they sadly lacked anything else.

This one fits the bill nicely. Like many of the best ideas the game is astonishingly simple: all you have to do is blow a bubble through rooms. But, of course, it's not quite as simple as that might sound. These rooms are filled with a collection of surrealistic graphics and traps, whose presence makes the bubble's



breath by pressing the shift key. Puff, though, is not unlimited: a bar at the bottom of the screen decreases rapidly the longer you keep your finger on the key. If you blow just a bit too hard Ghosty turns red; presumably the French go that colour rather than blue in

the face.

As you'd expect, the greatest problem with the bubble is that it has a tendency to burstthe walls or objects means the end. To keep it airborne and going in the right direction you

have to spin the

ahost around and On the first few screens this is simple enough since you only have to go in straight lines and the obstacles are few. From room 3

Atari ST Version

The graphics are witty and neatly drawn, with some entertainingly surrealistic touches. There could have been a few more screens, perhaps, but you still get a fun-packed progwith what there is.

8 IQ FACTOR FUN FACTOR ACE RATING 814

onwards, though, things get a little more tricky; puzzles and booby traps are introduced, while your route becomes much more tortuous. Candles appear - and their heat will cause the bubble to rise (there's a simple way to deal with this, but we'll leave you to figure it out). Expanding and contracting walls mean you have to guide the bubble through the gap at exactly right time frantic readjustments of your angle of blow.

# **BUBBLE GHOST**

#### Spectral fun from ERE INFORMATIQUE/INFOGRAMES



Later screens introduce further problems; frustration and addiction both mount the longer

The feel of Bubble Ghost is reminiscent of Thrust as you rotate frantically in attempts to keep your bubble going. And like Thrust, it's very addictive. The only possible problem with it is that at 40 or so rooms in size it may not take too long to get to the end. But while it lasts it's great fun.

Pete Connor

KELEASE BOX		
ATARI ST	£19.95dk	REVIEWED
C64/128	£9.95cs, £ 14.95dk	FEB 88
IBM PC	£19.95dk	FEB 88



## ARCADE CLASSICS

FIREBIRD rave from the grave



TO think that once upon a time we all went ga-ga over games like thesel Nowadays Space Invaders, Asteroids, Snakes and Space Wars look - and play like dinosqurs from the land that time forgot. It's all a bit sad really: a compilation of arcade classics sounds like a great idea

DELEASE BOY C54 €1.99cs OUT NOW they just haven't got the sophistication of graphics or gameplay to cut the mustard in these 16-bit times: only the strange deep space rock-Asteroids retains a

Pete Connor

ACE RATING 499

modicum of compulsiveness.

## INSIDE OUTING

The FDGF'S little gem

ISOMETRIC three dimensional games still make an

stately home. The object is to collect 12 hidden iewels and take them to the lady of the house - who spends her time. to say than do however

after the player has solved a

puzzle. Colourful graphics add a lot of atmosphere to a game that bears more than a passing

resemblance to Get Dexter Andy Smith







## **KROMA ZONE**

MASTERTRONIC blast again

YET another comes down the way of



pretty tough, depending on getting the right rhythm of the advancing waves. Assuming this is, with all sorts of shapes

PRED	CTED INTEREST CURVE	
Test that the time train has		
ACE RATING 431		

RELEASE BOX

Pete Connor

## SUPERSTAR ICE **HOCKEY**

DATABYTE'S puck prog



two versions - IBM PC and C64 of this game bring to mind; on the PC it's graphically smooth, sonically tolerable and good fun to play; on the C64 it's graphically poor, sonically naff and not a barrel of laughs.

The game's core is playing the game on screen; around this you can do all the usual stuff around with tactics and competing in a league over a season. All well and good, but you won't really want to bother unless the gameplay is fun. While on the PC you can bump and bare and see sparks fly

from your skates as you spin round on the 64 your man moves more like a bowls player to the accompaniment of sound effects that sound like someone sweeping the living room carpet - as such, it's one strictly for the dedicated loe Hockey fan

Pete Connor

RELEASE BOX		
C64128	£9.95cs, £14.95dk	OUT NOW 1
IBM PC	£24.950k	OUT NOW
SPEC 48k	£24.956k	JAN 88
ATARI ST	£24.95dk	JAN 88



### AMSTRAD

SUPER SPRINT Electric Dreams £9,99cs £14 99dk

Spectrum version reviewed issue 2 - ACE Rating 907 C64 version reviewed issue 3 - ACE Rating

A bit of a disappointment really, with little annoyances marring the game's playability Collision detection is badly off in places, and the 'feel' of the other two versions isn't really there. Still a good racing game, but not a creat one



ACE RATING 831

GO! £9,99cs £14,99dk m version reviewed issue 3 - ACE Rating 517

Great use of colour makes this sideways scroller a big improvement on the Spectrum version. On the gameplay front it's simple blast'n'search fare and the game task is still a bit too easy to provide any real long-term challenge - but what a stunner it is aranhi-



ACE RATING 681

RED L.E.D. Starlight £9.99cs £14.99dk C64 version reviewed issue 2 - ACE Rating

910 Spectrum version reviewed issue 3 - ACE Rating 910

Some very tasty updates are now available for your machines. Can PC owners afford to neglect Gunship? Can Amstrad owners be so unwise as to miss out on RED L.E.D.?

Bear in mind that even if we didn't particularly like the version of the game that we originally reviewed, the next version could be a whole lot better - as in the case of Trantor on the Amstrad, whose graphics put it in an altogether higher class than the Spectrum version.

Great scrolling - surprisingly smooth - and good use of colour make this on impressive and worthwhile conversion. As on the other versions, the combination of blasting, exploration and Spindizzy style dexterity gives it bags of long-term interest and a nice fat sat-

ACE RATING 915

**IBM PC** 

**GUNSHIP** Microprose £34.95dk

Excellent graphics, involving simulation and a variety of missions make this one of the best PC games in a long while. Piloting your 'copter around in order to zap various apoks may not be terribly tasteful - but if you can bear the politics you should have a lot of fun.



ACF RATING 902

**SPECTRUM** 

**IMPLOSION** Cascade £8.95cs C64 version reviewed in issue 3 - ACE Rating 702

Monochrome it may be, but the scrolling on this shoot-em-up's satisfyingly fast and smooth for such a tricky conversion subject The Utidium-style flipover is gone and the sound's pretty uninspired stuff, but the gameplay's still intact making it good, simple fun.



ACE RATING 694

AMIGA

LEVIATHAN Enalish Software £19.95

This Zaxxon-ish 3D shoot-em-up finally makes it to the Amiga, offering a competent but unexciting blast. Like other versions it lacks the feeling of urgency and desperation you get from a good action game. Graphically it's well-drawn and witty, but better use of colour would have made for more initial appeal

ACE RATING 746



# ACE

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PHILANTHROPIC you may be, place for it in the Phantom Club, the sequel to the highly original Movie. In the guise of

a lowly Zelator (beginner), you must travel through a staggering 550 3D locations ridding the Club's headquarters of evil, completing tasks and slowly climbing the ladder to Ipsisimus - overlord status with ample power to defeat the netarious Zara

Thankfully, the icon-control system which featured heavily in Movie has disappeared. In fact, almost the whole screen is devoted to the graphically-pleasing artifacts of the Club. You. Plutus, begin with five reincamations, full energy and Brainstorm (your fire power). The start room, and every location thereafter, is littered with objects - some good, some bad, some purely for decoration. To determine which is which will take considerable time.

Completing missions entails locating and killing a character. When you achieve Ipsisimus (level 10) you get to do battle with Zarg himself. However, a task is only set if you've attained the correct rank and have 40,000 points under your belt.

Points are gained by blasting the bizarre animated objects. When Zara's minions are shot they don't disappear: some characters freeze, others spin, the really nasty ones

Phantom Club is going to keep you locked to the screen for a long while. Neat

# PHANTOM CLUB

#### Evil evasion with OCFAN

graphics, pleasing introductory music and plenty for the hardened aroade adventurer to explore and blow away.

Richard Monteiro



Prepare to meet the levitating Buddha - If'll take quite a few shot to send him back to Nimons

R	Е	L	E	A	S	Ε	B	0	X

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#### Spectrum Version

This is a big game and is definitely one for the map pers and puzzlers. And if you didn't like Movie it's unlikely to grab you. Graphics are not terribly colour

7 IQ FACTOR ACE RATING 845



# FREDDY HARDEST

Playboy fun from IMAGINE

FREDDY, our eponymous hero, is billed, as the mischievous playboy in crashed his spacecraft somewhere in the Milky Way and must fight his way off the

The game is a two parter; the first half taking you through a horizontally scrolling large and nicely detailed and the aliens are large, neatly animated and suitably weirdlooking.

Having completed part one, you'll be given an access code which enables you to



e to be

oft on



#### RELEASE BOX

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load part two. Here you're inside the enemy base, searching terminals for a code with

Although part two's screens look completely different, the gameplay is more or less the same. The enemy base is a network crouch to avoid sounders and blast or kick the inhabitants and robots. You can also Freddy Hardest is essentially very simple

out of trouble, basically - so despite the different scenes in the second part, it all gets rather repetitive after a while. But it's jolly Christina Frskine

#### C64 Version

Gameplay appears slightly tougher than on CPCs especially on jumping and leaping, and you'll be tempted to cry 'loul' when floating aliens materialise have plenty of detail and the music sounds great

8 IQ FACTOR ACE RATING 715

#### Amstrad Version

Nice animation with Freddy strutting, floating robots bobbing up and down, aliens folloping across the screens. Gameplay fast with plenty to shoot and ful to the extent that the aliens look almost cuddly. Some of the collision detection is decidedly suspect, but when jumping from island to island it frequently

IQ FACTOR FUN FACTOR **ACE RATING 734** 

SPEC

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#### RELEASE BOX C64/128 68 95cs 614 95dk MMINENT 67 95cs OUT NOW £8.95cs, £14.95dk OUTNOW

#### Spectrum Version

As you'd expect from the scenario, there's nothing too intellectually demanding in Jackal, Graphics are rather poor by current standards; enemy soldiers are tiny and unconvincing stick floures, while backgrounds are standard issue stuff. The merely aver age sound does nothing to soup up the fun

GRAPHICS	5 IQ FACTOR
AUDIO	5 FUN FACTOR
100	DATING 407



## JACKAL KONAMI koin-op konversion

TWO years too late is the initial feeling you get upon playing Konami's latest conversion: the game is basically the old

Commando/Rambo idea in a jeep. The plot is perfunctory: you land behind enemy lines in order to rescue your captured troops. You get a jeep which can fire either a machine gun or missiles. When you collect men you then go to a heli-pad so that they can be picked up by a chopper.

As you'd expect, the territory is infested with enemy troops and defences. Soldiers troll around with ours and arenades: pillboxes with rotating guns are all over the place; tanks are plentiful. It's a question of



Spectrum version: Blast the gun, blast the tanks, blast the soldiers

blasting all and sundry in order to survive. Jackai's playing area occupies only

about half of the screen, and your leep isn't even centred inside it, so that when you get to the edge of the greg you're guite likely to get blasted by a gun-emplacement you couldn't see. Furthermore, the range of most of your weapons is such that you have to get dangerously close to things to shoot them

As well as the unsatisfactory gameplay, Jackal also suffers from addities in the presentation. In particular, the packaging might lead you to think that there were elements of choosing characters with different camabilities or weapons: no such luck. You get what you're given - the leep - and have to make do with it.

Peter Connor

#### **CPC** Version

The CPC Jackal is worse than the Spectrum in every respect; graphics are even more rudimentary. with miserable-looking soldiers you wouldn't really want to recruit if you were running your own army Sound is very weak and it certainly won't tax your

4 IQ FACTOR 4 FUN FACTOR ACE RATING 450

on the ST version, but it won't give anyone Christina Erskins

# **BLUE WAR**

#### Plumbing the depths with GO!

BV the very nature of the real thing, submarine simulations are likely to be slow. The emphasis is always going to be on tactithan making free with the torpedoes and blowing the enemy out of the water. Blue War certainly doesn't let you down in the slow and cautious department

The game looks like a rushed release Originally produced in France, the English version has been sloppily translated, with instructions like "Insert the disk 2 and push of West). On the ST versions, the instructions tell you to press T to fire torpedoes but they actually work a lot better if you press F

In the play, you command the submarine U79 in the Pacific Ocean in 1941. Get the craft going, dive - or not - sight your targets on radar/sonar check the map home in on enemy ships (this can take a very long time) and fire torpedoes at them. Go and refuel



#### RELEASE BOX ATARI ST £19,99de OUT NOW £14.99di

#### Atari ST Version

AMS

Nice graphics and some good gloomily echoing sound effects, but there's little excitement from either

GRAPHICS IN FACTOR 4 FUN FACTOR ACE RATING 450

#### **Amstrad Version**

It may be disk only, but it's appallingly slow to respond to key presses - yes, it's keyboard only. Controlling the submarine's course is much less

6 IQ FACTOR GRAPHICS FUN FACTOR ACE RATING 425

REAPERS, cascassins, fools: lend me footbase for the darkness descends on this fair Western like of ours. The Northlanders, once mere men like you and it, have been touched by the malice of the bark Souptre and have become the Lords Of The Shadows gripped by evil.

That, then, is the some set for this longcreated Mike Singleton game. The player takes charge of a band of warriors of varying ability and tries to use their differing characteristics in an attempt to betimen and recruit allies from among the other six tribes on the siland. The objective is to recover and destroy the Dark Sceptre before it can do more harm.

You view the game through an onscreen window that displays either a representation of the characters on their travels or a menu displaying a number of possible

RELEASE BOX			
SPEC	£7.95cs	REVIEWED	
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# DARK SCEPTRE

#### Make some strange friends with FIREBIRD

choices that are available to whichever character you happen to be controlling. Alternating between characters samply involves moving either your joystick (or pressing a key) left or right. You then issue up to three separate orders to the character; when you have finished, the screen switches to show your character stomping off to com-

## Familiarity breeds contempt?

When a programmer writes a very successful game, he can find himself with a reputation to live up to. Mike Singleton is one such programmer; his immensly successful Lords Of Midnight and Doomdurk's Revenge games have meant that any further release is bound to be compared to the earlier masterpieces.

In some respects Dark Sceptre is very comparable to the earlier games. The idea of having to recruit allies and utilise their particular abilities was seen in both of the earlier games, but despite being a very good game, Dark Sceptre just doesn't seem to create the same atmosphere as the other two games. It's involving all right, but not to the extent that earlier of the earlier games were. Could it be that Mike Singleton has reached the end of the particular very

plete the first order (to the best of his ability.)
Orders possible include: HARASSing other

Course possess and such as the course of the course of the course and Walt TOR wartoos. There are approx 30 different courmonth that can be issued to any number of your chanacters. As mentioned earlier, there chanacters have possible or thinked to the chanacters have possible or thinked to your chanacters. As mentioned earlier, the soon of maggind powers which oliber to be not your your orders requiring a center. Exosévédpe of such things, whereas Fook (despite the name) we persuative and poor the which makes them handy at convicting which makes them handy at convicting and possible course of the possible course of the course of possible co

Merely attempting to take the Soepte at the beginning of the game is not such a good lake as several steps have to be taken to ensure the power of the thing doesn't destroy you. There are lots of other objects found around the site that own be utilized in the attempt to seach your gool, and if su pto the player to discover how these objects are best used.

Dark Scepte has a very familiar feel about it if you've ever played Lords Of Midnight or Doordark's Revenge, in that the game is deep and complex with enough happening to keep you engrossed and playing for months to came.

Andy Smith

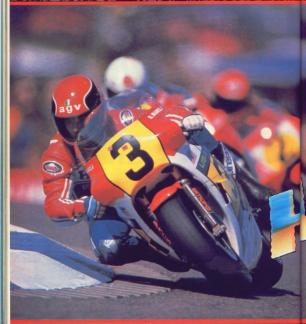
#### Spectrum Version

only in combat. A basic booker airward each figureprevent any him of ambatic claim. It is cleive effective and very well done. Sound at limited storping floatings and childing steel-on-stee effects, plus a thort piece of music to indicansiouliment or a desention. The target grams area an the amount and variety of objects that need to be amountained variety of objects that need to be amountained variety of objects that need to be amountained variety material south to puzzle in game position enables you to pick and play for altoperative which having to cover all themselves.

SRAPHICS 7 IQ FACTOR 7 AUDIO 7 FUN FACTOR 6 ACE RATING 856



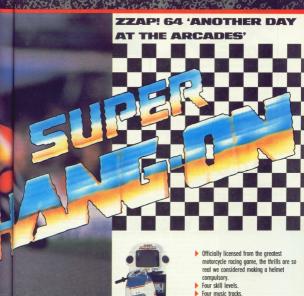
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# CHRISTMAS CRACKERS

of the cheapest ways of buying games - particularly if you are buying a new computer, even more so if voute buying one that has yet to attract a large software base (such as the Spectrum Plus 3). For around the price of a new full-price release you can add five, ten, even a dozen games to your collection. Classics of yesteryear, recent hits and the odd turkey all jostle for space on the tracks of these software albums. We take a whistle-stop tour of what's on offer this vuletide so you can make sure Sanlike as a stocking filler...

Commodore owners might be a little less impressed than their Amstrad and Spectrum owning colleagues...

#### Frank Bruno's Boxing Effectively a version of the

arcade scrapping game. Punch Out, this was Elite's contender in the boxing simulation stakes nearly two years ago. Eight boxers stand between you and the World Heavyweight Championship, each with their own particular tighting style. Viewing the action from behind your fighter, the aim is to reduce your opponent's stamina and then knock him down. Three knockouts leads to a convincina defeat and an access code is given which allows the next fighter in line to be challenged. And no, Joe Bugner isn't one of the eight bruisers ranged before you in this playable sports simu-

#### The Elite Collection

C16 £14.95 cs C64/128 £14.95 cs £19.95 dk Spectrum £14.95 cs Amstrad £14.95 cs £19.95 dk

An eight-game collection that leads on coin-op conversions and includes a title that was held back from solo release – Battle-ships.

#### **VOLUME I**

#### Bombjack

A competent conversion of Tehicons the coreen piction roung but set outped cusades on the track of fazing bombs. The action is staily straightforward - specing count acoth successive screen grathering up the bombs, and gother them in the cornect order for maximum points. There's no depth of pict or involved sonnoun to boffle the brain, patient-learning and skillful control are all you need.

#### Commando

fingers bleed.

Concorn provided the licence and the battlefield action is fast and furious in this one-man mission of mayhem and destruction. Romping, or should that be vomping across the vertically scrolling landscape the aim is to knock out four enemy fortresses. The enemy, quite naturally takes exception to such displays of heroism and a host of soldiers armed with single shot rifles, grenades, bazookas and mortars queue up to put an end to your ambition. Fortunately your sub machine gun never runs out of ammo and there are boxes of grenades lying around the terrain to replenish your supplies. The going gets tougher the further into the game you get should keep kill-crazy joystick wielders happy until their trigger

#### Airwolf

Assuming the role of Vietnam veteran Stringfellow Hawke your mission at the controls of a helicopter is to rescue five scientists held prisoner in a network of coverns. Before you can get to the imprisoned boffins the complex defence system that adoms the caves has to be shot out, element by element and there's always the risk of crashing into the rock walls. A golden oldie this, dragged from the mists of time when Elite was but a fiedgeling software house - still stands up as a shoot-em-up, not least because mastering the controls of the helicopter takes a

#### VOLUME II

Paperboy

This year's all-time chart hit

Every so often, collections of classic or notso-classic games appear on the High Street shelves, but at this time of year, with Santa about to start his annual round of house-calls, the software industry goes compilation crazy. Graham Kidd sniffs out some unbeatable bargains...



band by Gallup – it proved climost impossible to dislodge from the Number One sich. Ped-alling round suburbic as the representative of the local rog, the cam is to deliver papers to sub-scribers while avoiding pedestrions and komikoze vehicles. Rather than place the newspapers in letterboxes you have to hair them – miss, and you run hauf them.

the risk of breaking windows. At the end of the round bonus points are collected by riding over a BMX course and indulging in a bit of target practice. Annoy too many subscribers and vourse taken off the round - build up the round and the points potential increases. Not Elite's best effort at converting from the groades, but sales levels made it a clear winner...

#### Ghosts 'n' Goblins

A fair maiden is captured by an evil demon, so the knight has no choice - the demon horde and the forces of the supernatural have to be overcome on a scrolling quest to the demon's lair where the lady may be rescued. Probably Elite's best arcade effort so far - true to the original and lots of fun to play. Need more be said?

#### **Battleships** The game they dare not

release All credit to Elite for realising late in the day that this computerised emulation of the age-old pencil and paper game couldn't really stand up as a full-price release. There's nothing borrowed or blue in The Elite Collection, and this game slots in as the new'. An interesting diversion, but never likely to become a cult classic...

#### Bombiack II

Better than the original. For once, untrammelled by the constrictions of producing a faithful version of an arcade game, Elite had some fun. The caped crusader made famous by Tehkan abandons bombs (too dangerous) and collects bags of gold (more lucrative). Another platform/collecting game, the sequel boasts many more screens and includes mutating monsters that get smarter the longer you daily. The little baridies can be biffed, but that uses up energy and when the hero gets tired out he dies. Lots of fun.

Verdict: A good, solid collection of games that offers plenty of variety at a reasonable price.

#### Ton Great Games

	Gremlin
C64/128	£9.99 cs £14.99
Spectrum	£9.99
Amstrad	£9.99 cs £14.99

Not six of the best, but ten of the best names launched into the world over the last couple of years by Gremlin Graphics, Well nine then, and one from Vortex. Picky, picky...

#### Avenger

Gremlin's answer to scrollingshooting dungeon games like Druid and Gauntlet sets an oriental hero on a quest to penetrate the lair of an evil overlord. and rescue some scrolls. Inner force and endurance are deplet-



that try to thwart you as you kick and punch past them. A limited supply of deadly shuriken stars is available to hurl at the foe. Nothing outstandingly original here, save the moving sections of floor, but still a very playable dungeons deriva-

#### Future Knight

A slick platforms and lariders game set inside the hulk of a crashed spacecraft. The hero scurries round attempting to kill or avoid the beserk security droids as he hunts for extra weapons and keys and finally. the exit pass that gives access to the outside world. More spells have to be collected in the Great Outdoors before the imprisoned maiden (the cause of all this



frantic activity) can be freed. A polished aroade adventure that should challenge a range of

Krakout Breakout came back into tashion this year for an as-yet-unexplained reason, and bells and whistles were added to the basic concept by a host of software houses. Gremlin weren't going to be left out and so offered up this competent variation on the theme. Playable and fun. though arguably not the best of the second breed of Breakouts. but still stands up well, particularly on a compilation.

#### Bounder

A maddeningly addictive platform game with one major difference - the player's viewpoint. Controlling a bouncing ball, you view the action from above. bouncing from one section er as the vertical scroll forces the page. Ten courses to negotiate with a bonus section at the end of each, all packed with twists and turns - like airblowers to drive you off course, impassable walls that have to be bounded around and extra-bounce paving slabs. Airborne hazards and volcanos make life

#### Addictive, frustrating and fun. Footballer of the Year A sort of Tootball-opoly in which

your aim is to become, yes that's it. Footballer of the Year. Strategy is involved in deciding how to apply your financial resources. and a spot of arcade skill comes into play when you get to shoot at the goalmouth. Gamble wisely, play well and you could end up as F... ves, we've got the picture. An interesting, and potentially very addictive game that is playable even if you aren't a

#### Trailblazer

Woweel What a race game. Dispensing with the usual souped up bike or formula racing car, you roll a ball along a chequered pathway that scrolls out of space. Gaps in the pathway must be negotiated if a time penalty is to be avoided and colour-coded sections of track speed the ball up, slow it down or confer extra jumping ability. Desperately fast and furious. quick reflexes and a good memory for the track are called for if fun on your own, more fun with



Highway Encounter The only non-Gremlin game in this collection, chosen no doubt on account of its masterly use of 3D. An alien mothership lurks at one end of a long, dangerous highway and the means to destroy it, along with a team of five subservient droids is parked at the other end. Your aim: to push the deadly lastertron down the road and destroy the alien craft. Only one droid at a time can be used to shove the weamon, and a host of aliens lies in your path. Thought as well as shooting action is involved, as some patrolling aliens need to be boxed in by shoving barrels and boxes around the road.

#### Monty on the Run

The classic follow-up to the game that launched Gremlin. The hero mole is out of clink but wishes to flee the country - to do so money and an escape kit need to be collected by leaping round the platformed environment Monty finds himself occupying. Full of sneaky twists and tortuous puzzles, the game calls for pixel-perfect positioning and



a cool head. A dastardly difficult platform-based arcade adven-

#### West Bank

ag con

olls out

thway

track

down

viilde

mous

mem-

for it

Gameplay couldn't be much simpler: a door opens to reveal a goodie or a baddie. Shoot the goodie and lose, shoot the baddie before he shoots you and you win. Every now and then a little character appears in an open doorway with either a bomb or bags of money on his head. Shoot the bomb and you lose, shoot the money and you win. Move left or right to pan your field of view across the doors you have to defend, press fire to shoot. That's it, but the game's great fun to play.

#### Jack The Nipper

An arcade adventure with a fairly traditional find and move vital object to correct location' construction but featuring the added alass of comic characters that Leo Baxendale (deviser of the Beano's Bash Street Kids) would have been proud of. Rather than being a hero, you are cast as a tiny villain, not yet out of nappies, whose aim in life is to be as naughty as possible. Chuckle at the graphics, puzzle over the fiendish riddles and find yourself

Verdict; Essentially, 'The Best of Gremlin' - a collection of respectable games that represents excellent value and offers a wide mix of content and playing styles. A well-rounded selection that would form a good basis to a software library being started from scratch.

#### Live Ammo Ocean

Amstrad £9.95 cs £14.95 C64/128 £9.95 cs £14.95 Spectrum £9.95 cs

A 'specialist interest' compilation

this one - if you like your pixels militaristic and served up with plenty of opportunities for murdering the opposition, then Live Ammo is the compilation for you. Apparently W.H.Smith insisted that the name be changed to Live Action - we reckon it should just be called Sick, Sick, Sick...

#### Army Moves

We will fight them from the jeep, we will fight them from the air. we will fight them on foot. Such might be the motto of the Secret Operations Corps. You are one of this elite squad with a mission to retrieve a set of plans locked away in the enemy's HQ that



lies at the end of seven combatridden levels of play. Blast the baddies from the relative comfort of leep while avoiding hazards in the road, take to the air in a chopper and then fight through the jungle on foot. A difficult game to play - which can lead to frustration or total aridiction.

A one-mission import into the timgle on the trail of some captured comrades, this offers Commando-style play in a different multidirectional scrolling scenario. Purists may prefer Commando to this clone with Stallone, but there's a fair bit of fun to be had if killing gooks is your bag. including the opportunity to pilot a helicopter laden with your buddies (if you get that far). On the other hand, if killing 'gooks' is your bag, then you probably don't deserve any buddies anyway. A little short on playability. but fun for those with itchy fin-

#### Green Beret

Yet again it's kill the enemy soldiers and rescue your buddies

time, only it's a horizontallyscrolling killing field that you have to traverse. Armed with a knife and iron determination three levels need to be negotiated before the mission ends, each packed with running, jumping fighting men - and a truckload of soldiers waits for you to arrive at the end of a level. Grenades and flamethrowers can be collected by killing key opponents. but the extra firepower only lasts for a few blasts. Highly playable, every bit as much fun as the arcade original.

#### Top Gun

A porticularly good film tie-in - one that doesn't bother trying to mess around with following the plot. This is a one or two player combat flight simulator that seats the combatant in the cockpit of an F14 Tomogt (hence the Top Gun tie-in). Vector

graphics, with an abstract row of dots for the horizon, are used to display the view from the driving seat, and head to head combat is what the contest is all about. Excellent fun, even if you aren't a flight simulator fan. Even more fun when you play with a friend.

#### The Great Escape

Yet another classic title from the Denton Designs team, as much of a movie as a game - it's well worth just watching the action for a while before starting to play. Life marches on in the POW comp, whether you try to escape or not. Prisoners and guards go about their daily routine, seemingly oblivious of your intentions. Formulate a plan. gather up the equipment and try to make good an escape. Fail, or be caught out of bounds by the awards and it's a spell in the gooler... A challenging arcade adventure with a novel presentation. Some killing, but not a lot, which just goes to prove that you don't need blood-

shed to borrow your thrills from Verdict: Four out-and-out combat

games rounded off by a spell as a POW. Shooting to kill is the main theme, although there's some opportunity to use the Grey Matter to advantage.

#### Magnificent Seven £9.95 cs £14.95 dk C64/128

69.95 cs 614.95 dk Spectrum £9.95 cs

Not seven, but eight games in this action collection. Which one's the 'free' game? Answers please, on a postcard...

#### **Head Over Heels**

Jon Ritman provided the world with Batman and then went on to force even more convoluted



andrums onto the isometric world of arcade adventuring with this tale of two alien secret agents teaming up to destroy the forces of evil. Nothing tembly remarkable or new in terms of the presentation or style, but what a load of game it packs! Witty sound and graphics combine with the fiendish puzzles to capture the attention of the most avid arcade adventurer

#### Arkanoid

Another Breakout variant (see Ten Great Games above), this one gives you 33 frames of brickbashing ball-batting action. One of the best examples of the genre...

A first rate game on the Commodore from a new program-





ming partnership that lost out somewhat in the transfer to the Z80. A zany arcade adventure that casts the player in the role of planetary decorator - aliens have stolen all the colour from Wizworld, rendering it a drab place and it is the task of the Wizard, aided by his magic ball and pussycat, to collect and mix pigment and thus bring colour back to the world. A charming. offbeat scenario is enhanced by the way the wiz has to interact with his cat to get the task done.

#### Short Circuit

A film tie-in that consists of an 3D arcade adventure section followed by a chase and shoot sequence over a scrolling landscape. The cute robot. Number Five, has to find security keys in order to escape from a factory/office complex, preferably with some weaponry, and then avoid his makers as they pursue him cross country. Great fun on the Amstrad, a little flat on the Spectrum and less fun still on the Commodore. Strange how widely the three versions differ in appeal... Cobra

Another Stallone-clone tie-in: the battle action is against street thugs, a damsel is in distress, the backdrop scrolls horizontally and is peppered with platforms. Green Beret in a different guise and three different incarnations. almost. The well-playable Spectrum version is full of humour and added touches, while the Amstrad version is a little too easy and the Commodore Cobra more of a slow-worm than a snake.

#### Frankie Goes

To Hollywood A true classic that brought a new dimension to both tie-ins



#### ...And that's not all!

You should find a fair few more compilations jostling for shelf space over the next month or two. Three Coin-Op Classics is on its way from US Gold at £9.99 for instance, featuring Breakthru, Crystal Castles and Kung Fu Master (not the most powerful trio of arcade versions ever assembled). Then there's Beau Jolly's Five Star Games (again featuring two freebies, making seven) that comprises Alien. Way of the Exploding Fist, Strike Force Harrier, Trap Door, Finelord and Tau Ceti for everyone. with Amstrad owners collecting Tempest and Commodore and Spectrum people receiving Unidium Plus. A powerful collection for £9.95 on cassette or £14.95 on Commodore or Amstrad disk.

It doesn't all stop at Christmas, either. Should you find there's still some game-buying cash in the kitty in January, Hewsons' Four Smash Hits wouldn't be a bad buy, offering Zynapse, Explor, Ranarama and Undium Plus for £9.99 on cassette or £14.95 on disk (including Spectrum +3 if demand makes it viable).

and areade adventures. Denton Designs excelled themselves not a Frankie to be seen anvwhere in the game. Instead, the central character wanders round a terrace of ordinary suburban houses searching for objects by touch and using them to enter sub-games. Love, sex, war and religion factors have to be increased until they reach maximum whereupon the player becomes a whole person. Only then can you contemplate entering the pleasure dome. A very unusual playing style. involving a running sub-game in which you have to solve a

#### Not just for kids...

This year's charity compilation, Kids Play, offers ten pretty good games for £9.99 on cassette and is well worth checking out - not least because all the games and any profits made are sent help disadvantaged youngsters.

murder... An essential part of anyone's software collection if only because it's so different.

#### Yie Ar Kung Fu

Imagine's version of this Konami coin-op hit went down better than Way of the Exploding Fist in some quarters. Eight opponents range themselves against the humble Oolong, defender of right and justice, bringing into play their own personal weapons and fighting styles. Kick and punch your way past the opposition to fame and glory - If you can. Great fun for fight freaks.

£9.99 cs £19.99 dk £9.99 cs £14.99 dk £9.99 cs £19.99 dk

#### C64/128 Spectrum Ace of Aces

Amstrad

Remember Dambusters? Well this is arguably what Dambusters should have been but never quite was. Ensconced in the cockpit of a Mosquito you get to fly missions against Germany, choosing whether to intercept bombers or rockets or perhaps aging for a U Boat pen or train. Half flight simulator (no landing or taking off skills called for) and half areade combat game, this should keep potential Bigglesworths pleasantly amused - you don't have to pore over a huge manual and practice endlessly to start flying competently.

#### Infiltrator

A veritable pot-pourri of gamestyles is on offer in this mission to save the world from yet another madman and his henchpersons. Pilot a helicopter to the base in the flight-simulation sequence, avoid, kill or stun the guards in the madman's den and search the buildings for clues and vital information. Once the secret plans have been photographed, fly back to base and start all over again. A secret agent game that auditions all the skills needed to join the secret service.

#### Winter Games

An octet of icy action games from Epyx, the sports simulation specialists. Ski. skate or take the challenge of a cresta run in a bobsied. All the gloss polish and playability that have made Epyx leaders in the field - as much fun as Summer Games, World Games and California

#### Gauntlet

A hit conversion of a hit arcade game. Play solo or with a friend. choosing which of the four intrepid adventurers you wish to take into the walled dungeons. Collect food, treasure and potions, kill the nasties and attempt to conserve strength for the later levels. An excellent hack 'n' slay excursion into the world of scrolling dungeons.

#### Leaderboard

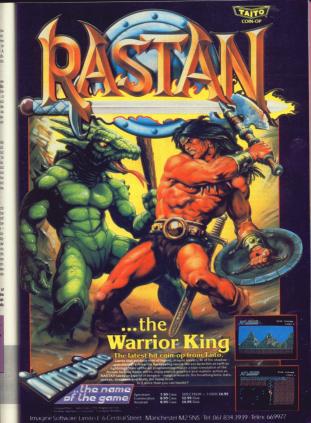
THE golf simulation Until Leaderboard arrived on the scene, golf was a game that hadn't managed to fire the imagination of game players you either had the 'purist' simulations (deadly accurate, deadly boring) or the so-called 'arcade' simulations (little stick men on green backgrounds). With Leaderboard, the controls were simplified the view of the fair. way given from behind the tee and the game finally made playable and fun for all.

Verdict: A good mix of gamestyles assembled from the better part of US Gold's back catalogue - a lot more user-friendly on disk, however.

# **Budget Bargain**

pilation - Micro Value are offering Four Great Games Volume Two for £3.99, and cover the Electron, MSX, Atari XL and offering different sets of





#### 10 Computer Hits 4 Beau Jolly

£9.95 cs £13.95 dk C64/128 £9.95 cs £13.95 dk Spectrum £9.95 cs

...And two 'free' games makes twelve. Everyone gets a copy of Spindizzy, the first-rate Marble Madness-esque spinning top game and Dandy. Electric

mon to all three formats:

#### Starauake

An excellent, cutesy. graade adventure from the programming parlour of Steve Crow guaranteed to amuse and entertain.

#### Deactivators A complicated puzzle

game that requires you to clear buildings of bombs and reassemble a computer using Deactivator droids Plenty of brainpower is needed to solve this unusual game.

#### Sacred Armour of Antiriad

A beautifully presented platforms-and-mapping areade adventure. Collect up the components needed to activate an anti-radiation suit, clamber into it and destroy the alien mothercraft that is terrorising your tribe.

#### Bride of Frankenstein

Go off in search of Frankie's missing organs in yet another arcade adventure - this time the action is a little quirky, but fun

#### Uchi Mata

Probably the only tudo simulation so far attempted on computer - and accuracy is the order of the day. To begin with, play is relatively easy, but serious thought as well as serious practice is needed if you are to progress to begting the more

skilled opponents. An outwardly complicated game that offers rewards if you persevere.

The Spectrum and Commodore collections 'share' three more games:

#### Classic Snooker A straightforward pot-the-balls

#### baize production.

Skate Rock

An unpolished but playable skateboarding excursion where points are awarded for collecting flags and avoiding hazards on a series of urban courses.

#### Allevkat A fast-action scrolling race

game from C64 cult program-

#### The Commodore collection is rounded off with:

#### Magic Madness An unusual and appealing subterranean platform adventure.

Iridis Alpha The excellent fast and furious Jeff Minter shoot em up that

includes sub-games where you can take a rest from the energycollecting and alien-killing which forms the core of the main

Spectrum owners can thrill to the delights of tomb-exploration in the 3D arcade adventure Pyracurse or go on a little private investigation all of their own with Contact Sam Cruise.

Amstrad owners receive a different set of five games along with the five common titles:

Triaxos Sets you in a fairly traditional 3D the guest to resque a man who is capable of saving the human race. The page of the game is a little slow and the puzzles less than mind-twisting, but there's enough to keep you busy during a rainy afternoon.

#### City Slicker

Off you go in pursuit of the equipment to defuse a terrorist bomb, following a fairly traditional adventure format set in London and featuring

orcode

#### scopes. Pulsator

A straightforward maze game that doesn't impress with the graphics but sets quite a tricky task involving the rescue of five coptives.

many familiar land-

#### Elektraalide

A race game with a difference you race against time on a set of abstract courses, hindered by spheres, cubes and bolts of eneray dropped from the skies. Differ-

#### ent, but a bit dodgy. Revolution

A tortuously tricky maze puzzle in which the player seeks to cross successive levels that make up a hostile 3D landscape. deactivating two cubes on each level. In control of a bouncing ball, the aim is to avoid falling into a bottomless chasm, escape the clutches of a variety of abstract but mobile aliens and touch first one cube and then the other within a rapidly diminishing time limit. Tricky stuff

Verdict: A fairly random selection of games presented here, some classics mixed in with some mediocre or less successful titles. Nevertheless, good value for money and a reasonable mix 'n' match of gamestyles.

#### Game Set and Match

Ocean £12.95 cs £17.95 dk Amstrad C64/128 £12 95 cs £17 95 dk Spectrum £12.95 ns

Twenty two sporting events in one package - enough material to form the basis of a pretty neat armchair olympics that should

Eight games are common to all formats: Basketball, Barry Ma Guidan's World Championship Boxing which sets you on the quest to beat Barry himself an offers the opportunity to set up the personality of your contender and train him between each bout in the lead up to the challenge tight: Jonah Barrington's Squash: the classic coin-op joystick waggler Hypersports featuring six events; Ping Pong. again from the arcades; Daley Thompson's Supertest - an octathlon rather than a decathlon; and Super Soccer.

Commodore owners round off their work out with Snooker and tennis in Matchpoint, while Spectrum and Amstrad athletes take a gentle bar-room break with Pool before going their sepcrate ways onto the tennis courts, with Konami's Tennis and Matchpoint respectively.

Game Set and Match offers a positive orgy of muscle-wrenching athletic action and represents stupendous value to anyone who prefers to work up a sweat in front of the TV rather than out there on the field or in the court. This is the only specialist, theme compilation on offer this Christmas and forms an essential. good value purchase if sporting simulations are your mainstay. Just about all the games on offer are high quality and were very well received on their first outing, but some of them do go back rather a long way...



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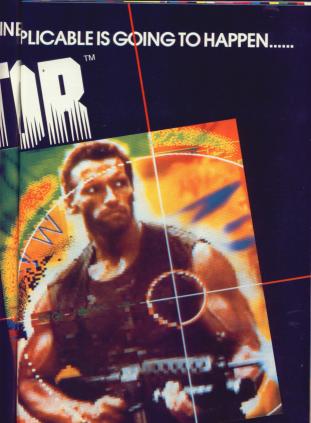
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# **UNIVERSAL MILITARY** SUCCESS?

Rainbird's Universal Military Simulator is designed to simulate a conflict between two forces on a user defineable terrain that can be viewed in three dimensions from any one of eight directions. The programme takes full advantage of the ST's GEM display and heralds a new era in 16-bit computer wargaming.

UMS is one of a small number of pro-grams released during 1987 that show the true promise of 16-bit computing the use of increased processor power to after radically the games we play and the challenge they present. Lords of Midnight, from Beyond, introduced Landscaping and by offering a window onto the world of Midnight, tempted many players who might otherwise have been put off by its 'strategy' associations. In a similar fashion, UMS puts more detail, more features, and more scope into the wargamer's hands than ever before, and does so with a style that could well open up the market to those previously unin-

There are five pre-set scenarios (with further scenarios to be made available in

Up to eight orders may be issued to any unit at the start of a simulation phase and these are processed by the computer with a pause between each of the eight stages, at which point you can check what's aning on

Many considerations are taken into account by the program including morale, terrain, and efficiency. Once a simulation phase has been entered you cannot change your mind about the orders given, which is perhaps a

ch avoids piling units up on the same spot) and will then disp





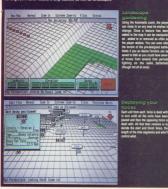
Viewing the battle field of Gettysburg from one of the eight possible

future). These range from Arbela in 331BC to Gettysburg (1863). Whether you play one of these or one of your own the program first enters the Run Simulation section, which in turn presents an Issue Commands phase and the Movement/Battle Phase. The computer can play one, both or none of the forces involved and can also be forced by the player to make tactical decisions.

Once the desired strategy has been decided, a three-dimensional grid-map of the terrain is displayed, showing hills, ridges, decressions and other features. The map can be viewed from various distances and from various angles, but always from slightly above. Forces are shown on the map as markers pointing to a corner of a grid square, each marker indicating the type or commander of the unit.

#### Creating a scenario

Have you ever wondered how Napoleon would have fared against Alexander the Great o field at Gettysburg? Well even if you haven't, UMS gives the player the chance to cre in forces of almost any size from absolutely any time period on a te the player. That level of interaction really does give a wargamer scope to exercise his in periment with an infinite number of what it's. Creating a sociatio services is similar periment with an infinite number of what it's. Creating a sociatio merely requires the pit the terrain and the forces—and then put them together. The player is limited only by in altition when I come to creating sociations, and the manual shows examples of terrains, both interior locations (e.g. castles) as well as landscapes.



weak point but mirrors to a certain extent the irrevocable nature of commands given in real warfare. Battles can be saved to disk at any stage and can be resumed whenever the player has the inclination to continue.

UMS is not a simple program to master but it repays careful study. The instructions are slightly too concise, simply because there's so much to cover, but anyone with an interest in setting up fantasy, theoretical, or

able. It's also worth mentioning that Rainbird will consider marketing scenarios created by users, in much the same way as Incentive market araphic adventures created by their GAC utility.

Zooming in - making tactical decisions can be helped by viewing the forces from close range and from many angles.

#### **Universal Military Simulator**

1 10,011	DITO CONTRIG	
Atari ST	£24.95	IMMINENT
BM PC	£24.95	IMMINENT
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#### Panel of Experts



Warpaming Group are staring at... Alexander vs Derius in

We called in the local experts to pass judgement on UMS. Chris Brann, from the Bath Wargaming Group, together with Garrett Moorhouse, Mark Thursfield, Nick Gray, Mark O'Donnell, and John Csonka, put UMS through its paces and delivered their considered verdicts.

Although initially impressive, members found the displays of the larger scenarios (e.g. Waterloo) confusing, despite the numerous Zoom options. This, combined with the difficulty of including rivers in the terrain, led to some doubt as to the program's suitability for setting up modern scenarios, where conflicts cover very large territories. 'The program's going to be great for anything pre-20th century because the battlefield's likely to be smaller. But take something like Battle of the Bulge with a huge playing area and you could find things getting very complex."

Some sort of randomising factor should be included, affecting the response time of certain units, for example, so that the 'nail-biting' aspect of wargaming could be emphasised. A further option suggested was the ability to designate parts of your own army as computer controlled, thereby simulating the action of independent commanders.

In addition the position of the commander-in-chief could be shown, with perhaps a viewpoint of the battlefield from his/her location. This would introduce some of the problems arising from fields of view, where the action is hidden from those who are directing

Everyone was very enthusiastic about UMS, despite the suggestions made above. 1 can think of some tremendous scenarios you could program on it', enthused Garrett Moorhouse, and members were particularly excited by the ability to 'blank out' the opposing army, making it invisible to the player. That feature makes the program ideal for guerilla warfare simulations, with irregular troops and limited intelligence on their location.' Chris pointed



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# TRICKS' TACTI

# F-15 STRIKE EAGLE

SPD:518

C64 version

Going crazy with frustration at always running low on fuel before vou've taken out more than two enemy installations? Frustrated that dropping external fuel tanks, or otherwise lightening the aircraft by progres sively using up the ordnance mounted on external pods, appears to make no difference to the fuel burn? Well, now a solu-

tion to having to constantly return to base for fuel is at hand!

response This has the additional advan-

Engine power is rated by turbine t.p.m's on a percentage basis. This corresponds to the keyboard as follows:

60% 65% 70% 80% 85% 90% 95% 100%55%

Afterburners can be engaged by pressing the 'A' on the keyboard; this is quoted as increasing the fuel consumption at a rate of "about 60% higher than at the 100% rpm.

At the bottom centre of the screen cockpit layout is the fuel status display. This reads as pounds of fuel remaining and is constantly reeling downwards. Careful observation will

the direct relationship between the percentage of thrust the pilot has selected and the amount the fuel decrements - this relationship is as follows

Keyboard 1 2 3 4 5 6 7 8 9 0 lbs fuel 6 7 8 9 10 11 12 32

So, if the pilot is running at 75% rpm's for example, the fuel status display will be going down in leaps of 7 lbs at a time. But if 55% rpm thrust is selected and then the afterburners engaged the aircraft's speed increases but the fuel burn rate remains at 3 pounds

The pilot now has the range and endurance to do a great deal more damage to the enemy. He can fly at Mach Plus speeds on route to targets or fight at an optispeed for threat

tage of enabling the pilot to more effectively decoy heatseeking missiles. If the afterburners are engaged and a heatseeker is closing on the aircraft the tactic to follow is; wait until the missile is within 5 miles, disengage afterburners and simultaneously release a decoy flare. Take immediate evasive action, ie, sharp turn, and the F-15 will always escape; the heatseeking S.A.M. will lose the extremely intense heat signature of the exhaust on afterburners when the much cooler signature of 55% thrust is selected and follow the flare instead.

And, with this tip, you can usually always afford to fly with afterburners engaged

WARREN CANN. East Finchley

# **SUPER SPRINT**

Make sure you always qualify on the Spectrum with this poke

- 1 REM Super Sprint poke
- 2 REM (c) J Humes '87 3 REM ACE Dec '87
- 5 CLEAR 32767 10 PRINT AT 10-3: "START
- 'SUPER PRINT TAPE" 15 LOAD ""CODE 65088
- 20 POKE 65108, 194
- 20 POKE 65108, 194 25 POKE 65092.37
- 30 FOR F=65400 TO 65413 40 READ a: POKE F;a: Next F
- 50 DATA 62,201,50,206, 192,195 60 DATA 0, 154,205,64,254, 195
- 60 DATA 0, 154,205,64,254, 195 70 DATA 44,255 100 RANDOMIZE USR 65408

JERMAINE HUMES, Enfield

# NINTENDO THE FIRST CHEAT?

This tip for Super Mario Brothers will prove invaluable for anyone having problems in the Nintendo classic



After you die and go book to the title screen, instead of pressing start press button A and then at the same time as holding button. A down, press start. You will now be returned to the previous world you were on, selpping all the levels before it. For example, if you are on level. 4-2 and, you die, do the

RICHARD ELTON, Stoke-on Trent

# MYSTERY OF THE NILE

Mysterious passwords on the C64

Level 1 HD576172V Level 2 HE576171V Level 3 HF576170V

MITCH POMFRET, Stockport.

110 Advanced Computer Entertainment

# PLEXAR

Spectrum



BEN SINCLAIR, Farnham

# INDIANA JONES - THE MAP

PART



Jefferson Thomas has provided a map of the first part of Indy Jones, showing the positions of the captive children, the snakes and the whip poles

CAPTIVE CHILDREN

# GOLDRUNNER | MISSION Amiga indestructibility

Press 1 to start a 1 player game, then fly forwards straight into the first building. When you crash, hold down the F5 key until you see the status screen. Then - with a little bit of luck - you can pass through anything unhurt.

MAX HARROWER. St. Austell

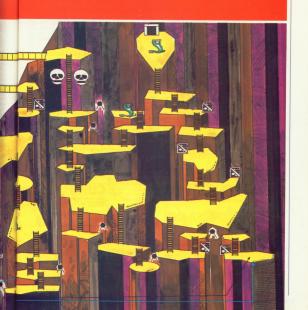
# **GENOCIDE**

Choose your level on the Amstrad version

To activate the cheat mode type QED on the title screen then press keys 1-9; This gives access to these levels.

RICHARD JENNINGS, Abeaeron.





# INFINITE NAUGHTYNESSI

Infinite Naughtyness on the Spectrum Jack the Nipper 2 Plus the chance to change those 'orrid control kevs.

10 REM JACK THE NIPPER 2 20 REM @ 1987 CHRIS WILD 25 REM ACE Dec '87 30 CLEAR 24575

40 LOAD "" SCREENS 50 LOAD "" CODE 60 POKE 43251, 0: REM (INFINITE LIVES)

70 LET A=50 LET B=247 80 LET C=71 90 REM LINES 110 - 150:-INVINCIBILITY 100 REM LINES 160 - 220: - CHANGE

110 POKE 41222, A:POKE 41229,A 120 POKE 41297, A:POKE 41330,A 130 POKE 41444,A: POKE 41576, A 140 POKE 41696, A:POKE 41763, A 150 POKE 41797, A: POKE 42314 160 POKE39820, B:POKE 34372,B 170 POKE 49884.C:POKE 49911.C 180 POKE 49897.C.POKE 49863.87 190 POKE 49891, 251

200 POKE 49905,253 210 POKE 49870 223

220 POKE 49857, 127 230 RANDOMIZE LISE 34240

This results in the new control keys being:

Q-up A-Down O-left P-right M-fire

1-Quit 3-Music (on/off)

> If you were happy with the old keys then simply leave out lines 160 - 220

CHPIS WILD Oldham.

Infinite lives on the Spectrum

1 REM ACE Dec '87 4 CLEAR 49151 5 LET T=0: LET W=0 10 FOR F=47872 TO 48000 15 READ A: POKE F.A 20 LET T =T+A\*W: LET W=W+1 30 NEXT F 35 IF T 922903 THEN PRINT "ERROR IN DATA": STOP 40 PRINT AT 10.3: "START RENEGADE TAPE"

45 LOAD " CODE 50 RANDOMIZE USR 47872 100 DATA 221.33.111.187.6.6.197 110 DATA 221.110.0.221.102.1 120 DATA 221.78.2.6.0.17.0.125 130 DATA 237.176.2356.54.201.30

MARC DONNELLY, Goole.

# **RE-BOUNDER**

Infinite lives on the C64

Type it in the poke, save it, then load the game.

15 REM ACE Dec '87 20 PRINT CHR \$(147) 30 FOR FR= 14080 TO 14164: READ A: POKE F. A:NEXT F 40 SYS 14080 50 DATA 32 44 247,32,108,245,169,19,141

60 DATA 134.9.169.55.141.135.9.76.16 70 DATA 8 169 76 141 45 1 169 37 141 80 DATA 46 1 169 76 141 47 1 76 0 1 169 90 DATA 49 32 63 1 162 0 189 58 55 157 100 DATA 0,4,232,224,32,208,245,76,0 110 DATA 4,169,51,32,63,1,169,52,32 120 DATA 63.1.169.234,141.36,145.141.37

145.141.38.145.76.16.128.0.0.0

MR R GADD. Cheltenham

# **GRAND PRIX** SIMULATOR

Cheat for the Amstrad

On the Title Screen, Type in TRACK, then the letter of the track you wish to start

JASON YATES, Birmingham

# LAZER FORCE

Choosing levels on the C64

When Lazer Force has loaded, switch to the demonstration mode. When the demo is finished, hold down the Commodore key, and the keys 1 and 2 simultaneously. You will now be put straight on to a high level with 6 lives. This will not work, however, until the program demonstrates a level higher than level 3

PAUL LAMARQUE. Birmingham.

# STAR PAWS

Unlimited food on the C64

3 For I = 10497 to 10526 :READ A: POKE, I.A :C=C+A Next I 4 For I = 512 to 519 :Read A :Poke I.A :C=C+A NEXT I:IF C=3988 THEN SYS

10505 5 PRINT "ERROR IN DATA!!" 6 DATA169.2.141 5. 84 76,1,82,198, 157,169,0,162,1,168, 32 186 255 32 189 255 32 7 DATA

213.255.78.215.8.76.32.8.169.96.1 41,186,23,76,0,16

R.MANOJ, W Finchley.

# **CLEAN UP** SERVICE...

C64 - infinite lives

250. 141.76.68.68

Enter and RUN this listing for infinite lives for both players.

1 FOR B=558 TO 584: READ A: POKE B,A: NEXT: POKE 157,128: SYS 558 2 DATA 169, 59,141,40,3,169,2,141, 41.3.32.86.245 3 DATA 169.31.141, 207.1.96.169, 185, 141,

THE MASTER HACKER. Clywyd

10 REM RE-BOUNDER

# GAUNTLET

ST - infinite health

Cthen

am

C64

s fin-

di with 6 the har

58.

Load ST basic, then type in and save the listing. Insert your Gauntlet disk A with write-protect off and type RUN. Follow the on-screen prompts from then on.

RICHARD MONTEIRO, Yeovil

def seg=-1:for a=1 to 324 read a#:bnval("&H"+a#) poke &H20000+a,biqma+b:next if q<>23955 then 510 def seg=0:loc#=&H20056 440 input "Health (0 to 999999)":h

print'Error in DATA":end

# QUEDEX

Enter and run this listing for infinite units (when collecting bonus, press fire to access the bonus

1 FOR B=528 TO 554: READ A: POKE B.A: NEXT: POKE 157,128: SYS 528 2 DATA 169,29,141,40, 3,169,2,141,41

3 169, 3,141, 206,1,96,169,181, 141 96,46,76,235,2

THE MASTER HACKER,

# ANARCHY

Clwvd.

Knock out the sprite to sprite collision detection with this little routine. Enter and RUN the listing hefore LOADING the game.

1 FOR B=379 TO 390: READ A: POKE B,A: NEXT: POKE 157 128: SYS 379

> 2 DATA 32,86, 245,169,1 ,141,29, 4, 96, 206, 202, 32, 76,162,124

> > THE

MASTER HACKER. Clwyd.



Every month the amazingly generous people who run the Tricks 'n' Tactics section here at ACE give away software - not to any Tom, Dick or Harry, but to deserving causes. That means those people who have done a service to their fellow games players, by providing a tip, a map or a poke that has helped others to ever greater achievements

This month Jefferson Thomas picks up Bobsleigh, Deflektor, Driller, Dark Sceptre, Phantom Club and Nebulus for his Spectrum. Why? Because his Indiana Jones map is the tip of the month, that's why. But there's more to come: Warren Cann receives Nebulus for his C64, Max. Harrower

gets Leviathan for his Amiga, Chris Shaw wins Drillier, R. Gadd gets a C64 Nebulus and Mark Donnelly gets Drillier for his Spectrum So what are you waiting for? With prizes like these you'd have to be STARK STARING BONKERS not to share your knowledge with the rest of us.

The address to send your masterworks to is

TRICKS 'N' TACTICS 4. QUEEN STREET BATH BA1 1EJ

Nebulus, Bobsleigh, Driller, Buggy Boy.

and don't forget to state clearly your name, address and computer Don't know which games to tip, map or pole? We reckon that the following games are going to cause quite a few problems: Stealth Fighter, Skate or Die,

Coin-op tip winner this month is Will Dowling, who gets Driller for his Spectrum in return for his copious Spy Hunter tips. Where are the rest of you? Don't be shy - we love to hear from you. And what about some tips on Xenophobe?







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# IN THE ARCADES

A bumper set of tips on Spy Hunter wins WILL **DOWNING of Daventry** this month's arcade tip prize; if you think you can come up with anything as good, get it down on paper and send it in NOW! it catch up and overtake. When the road expands, move over to the left verge (the van will follow) and accelerate inside. Your scoring continues while travelling in the van. so this means an easy 500-700 extra points (not to mention your weapons

3. Use oil-slick sparingly; one quick squirt is enough to send an enemy agent sliding out

4. Only shoot missiles when the helicopter is about to drop a bomb. Shot enemy agents come to a dead stop, so be ready to swerve

5. Switchblades will not sprout their deadly spikes on curves. Sometimes, the enemy ggents unwittingly destroy each other. Any-

thing explodes on contact with the Switchblade spikes, and it loses the spikes on the 6. The Mad Bomber destroys whatever he

hits and, on the water 7. Barrel Dumpers sail straight into each

8. Weapons Vans are impervious to all enemy weapons - but vulnerable to yours. so don't shoot or slick them

9. On the water, your steering is as loose as on icy roads. Sail slowly, because Barrel Dumpers drop barrels when directly in your path and Doctor Torpedo can only fire if some distance behind you. It also shoots backwards so, if you have no fiery oil-slick, slow down and let it overtake, then shoot it quickly. No more than two enemy boats will menace you at the same time, except when you first join the river (as many as four may come at you). If you miss the

boathouse back onto the road, beware of an island in the middle of the river; pass it carefully on the right or skip

over it at high speed. 10. If you go from an icy road to the water, stay there and bypass the boathouse. Shortly after the island, the land undergoes an instant thaw

back to green - with safe 11. Watch out for civilian vehicles in front of the van: it will swerve to avoid them. which may cause you to

12. Bugs - when your our tolls back out of the van (on the right-hand

verge), you can drive straight forward through trees, across water and over broken bridges - without any trouble, and rejoin the road at any time. This is best used at high speed, and is good for locating a clear stretch of road (but don't forget to slow back down again?) No points are scored for travelling in this way and The Enforcer comes creeping up the opposite verge and starts shooting at you when level (about a dozen shots are fatal). Watch out for the road curving to the right and forcing you back onto the tarmac - there is no turning back after rejoining the road

13. If the helicopter bombs you while driving 'cross country', the game resets itself and sacrifices your credit. A bonus derived from this is the elimination of The Enforcer and Doctor Torpedo, thus making things a little easier for you

14. When in a bright green territory (see table), keep well in front of the weapons van until the sharp curves. Allow it to overtake you on this stretch and, as the road straightens out again, the warning BRIDGE OUT - DETOUR ON LEFT appears. Quickly

drive into the van and you will be carried onto the bridge-verge. When you reappear, stay still and wait. When The Enforcer slides up alongside, drive slowly away and keep to the iron verge. You will be shot at, but harmlessly; do not worry as you approach the broken gap because, as long as you keep to the verge, you will pass safely across. The Enforcer, howevr., comes to a halt on the gap and gets left behind. That should be the last you see of it - and Doctor Torpedo.

# ROAD BLASTER

1. The green and red bubbles are extra

2. When you reach the first lot of mines stay

in the middle lane. 3. To increase your reserve fuel, fire at each orange car or motorbike once. This increases your multiplier by one every time. Once this reaches ten you will get more score, which will eventually increase your fuel

4. Purple cars are indestructible 5. To catch the special weapon, wait till the

jet flies over. Move over to the middle laneand this will guarantee a special weapon. 6. When you catch the nitrous oxide burner

do not use it straight away 7. The special weapons are limited. You get about 50 rounds of UZ cannon, three nitrous

oxide burners, three Cruise missiles and a shield which lasts about five seconds. 8. If you have tanks at the side of the road, stay in the lane you are in and you will not

be blown to oblivion. Darren Winn, Exeter

# SPY HUNTER

The road's features are random, without sequences that can be memorised. The surrounding countryside, however, changes, colour in regular patterns. These territories have different features, their own weapons van and are of roughly equal length Toward the end, the road forks into a dual

Territories:

1 Bright green - sharp curves tust before boathouse, short dual carriageway 2 Yellow - sharp curve between bridges. short dual carriageway

3 Grey - mostly straight and wide, long dual carriageway. 4 Brown - sharp curves before and after

bridge, short dual carriageway. 5 Dull green - straight and wide, long dual carriageway.

1 2 3	1	II	111
1 1	A/C	5	3
2	A	3	4
: 3	В	1	4
: 4	C	1	1
y 5	A	2	3

I - Weapon II - Take left carriageway, III - Take right carriageway

Weapons A - Oil Slick B - Smoke Screen

Tips
1.lf, at the end of the timer countdown, you have reached a third territory without losing any cars or destroying any civilian vehicles, you will probably earn two extra

2. While driving down a dual carriageway. press the WEAPONS VAN (if still lif) and let

Advanced Computer Entertainment 115

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### **GAME SET and** MATCH-

#### Ocean

A massive compilation of 10 complete sports games - including Konami's HyperSports, Ping Pong and Tennis, Daley Thompson's Super-Test, World Series Baseball,

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Version					
Spectrum cass					
CBM 64 cass					
CBM 64 disk					
Amstrad cass					
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#### WIZBALL

Ocean Use the combined powers of the bouncing Wizball and Cataball to collect magic water drops. Original and addictive.

Version	RRP	ACE price	Order code
Spectrum cass			
CBM 64 cass	8.95	6.95	A109CC
CBM 64 disk	.12.95	10.95	A109CD
Amstrad cass	8.95	7.95	A109AC
Amstrad disk	14.95	11.95	A109AD



# TOP GUN

Ocean You've seen the movie, now plan your own doglights. One and twoplayer action.

Version	RRP	ACE price	Order code
Spectrum cass	7.95	6.25	A114SC
Amstrad cass	8.95	6.95	A114A0
Amstrad disk1	4.95	11.95	A114A[
IBM compatible1	9.95	15.95	A114PC
Atari ST disk1	9.95	15.95	A114ST



# **EPYX EPICS**

US Gold/Epyx

Collection of four stunning classics Summer Games, Impossible

rsion			RRP	ACE price	Order code
BM	64	cass.	9.99	7.95	A105CC
ВМ	64	disk	14.99	11.95	A105CD

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Gremlin Blockbuster title combining football management skills with exciting

Version		ACE price	
Spectrum cass			
CBM 64 cass			
CBM 64 disk	14.99	11.95	A121
Amstrad cass	9.99	7.95	A121
Amstrad disk			
Atari ST disk	19.99	15.95	A121



# TAIPAN

Advanced strategy game based on the James Clavell novel. Western RRP ACE price Order code
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Atari ST disk ... 19.95 15.95 A113ST



# BALANCE OF **POWER**

Mirrorsoft A demanding game of strategy. 
 Wersion
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 ACE price
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 Attani ST disk
 29 95 24.95
 A117ST

 Armiga disk
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 A117AM

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Mirrorsoft All action flight simulator and shoot-

em-up.			
Version	RRP	ACE price	Order cod
Spectrum cass.	9.95	7.95	A1159
CBM 64 cass	9.95	7.95	A1150
CBM 64 disk	14.95	11.95	A1150
Amstrad cass	9.95	7.95	A115A
Amstrad disk	14.95	11.95	A115A
Atari ST disk	24.95	19.95	A115S



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US Gold A collection of five fantastic titles: Infiltrator, Leaderboard, Gauntlet. Ace of Aces and Winter Games.

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	7.95 7.95 7.95 11.95 7.95	7.95 A1220 7.95 A1220 11.95 A1220 7.95 A1220 7.95 A1220 7.95 A1224

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.9.95 7.95 A1194 IBM

# CBN MASK

Hou

Versio

CRI

Gremlin Addictive gameplay based on the

ersion	RRP	ACE price	Order coli	Mi
oectrum cass	7.99	6.25	A101S	Str
BM 64 cass	9.99	7.95	A1010	plu
BM 64 disk	14.99	11.95	A1010	
Amstrad cass				Versi Ata
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Logotron Ingenious maze game, packed wit with mind-bending puzzles. Original and Versit CBM 64 disk......12.95 10.95 A1190 Am

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**GAME OVER** Imagine Exciting shoot-em-up featuring huge, evil guardians at the end of

ion	RRP	ACE price	Order co
ectrum cass	7.95	6.25	A1108
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IM 64 disk1	2.95	10.95	A1100
strad cass	8.95	6.95	A110
netrari riisk 1	4.95	11 95	A110



# SOLOMON'S KEY

Wizard coin-op game packed with puzzles and invention.

Version F	199	ACE price	Order sa
Spectrum cass	1.99	6.95	A1045
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CBM 64 disk14	.99	11.95	A1040
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# ACE PINK PAGES

In these Pink Pages are the first of our regular Buyers. Guides to home computer hardware and software. The guide is inlended to give you the information you need to buy the right hardware and software at the right price. We ve listed details of 12 basic machines and their various models, plus consoles; and in the software section we ve given the lowdown on 50 games we recommend.

Each month we'll be updating the information to keep you informed of the swings and roundabouts of prices and availability. We'll also be spotlighting a particular area; look out next month for a guide to peripherals.

We've also got the first of our Reader to Reader pages; in here you'll be able to place your own small ads – free, grafts and for nothing. Is there a better place to sell your machine when you want to upgrade? In Reader to Reader you'll also find Adventure Helpline (a boon to all those stuck in a dark room with a goblin).

We hope the ACE Pink Pages will prove a valuable reference guide to anyone making a computer hardware or software purchase, and to those seeking help from or contact with other readers. They're your pages; so please write in and make use of them.

The ACE buyers' guide is essential reading for anyone who is considering buying a new computer, whether it will be your first ever forey into the micro market, or you hope to upgrade your current yestem. We've compiled a list of features and specifications for all the models suitable for home use in the shope Graphics, sound, software availability, prices, bargins. It's all here.

# Before buying

Even if a new computer is only a dream at the moment, the buyers' guide will make it clear just what's on offer, and help you decide which system is best for you. But before you rush out to the shops there are two things you need to consider

caretuly.

Firstly, how much you can afford to spend, whether it's in cash, hire purchase, or plastic money.

Remember to leave yourself a bit of money/credit over for software, and it possible, for peripherals. It may only be a couple of months before you decide you can't cope any

longer without a disk drive, or a monitor.

Secondy – and just as important – what do you want to use the computer for? Are you really going to learn to program? Do you sinceedy want to put your home accounts on computer, or produce the company nesistent? Do you want a 'serious' micro, a gameel micro, or something that commises a bit of both? Think carefully about these points before you buy? these's nothing worse than being lumbered with a machine that doesn't assign.

The ACE Buyers Guide can't make your mind up for you; but we can give you the facts that will allow you to make a sample decision.

Where to buy

- the high street chain store -
- the independent computer pecialist shop
   a mail order company

second hand.

in the high stheet stores you should got a fair price for your machine, you should also be able to take it away with you immediately. Furthermore, many stores offer attractive burnder, giving you ties of exits goodes with the basic machine. But the salesperson behind the counter worth recessarily be very knowledgeable about the systems you wish to choose between Also, it is not always possible to have an in-depth demonstration of the various machines on

In an independent specialist shop, the salesperson could well know the machines better and be able to demonstrate them more fully but you might have to pay slightly

If you buy on mail order, you can't, of course, have the machine immediately and you can't have a demo of it, but you might come across a cheaner note. If you order

sure you know exactly what components you are getting before you send off your money, send a covering letter with any money and keep copies of those letters, and keep a note of the cheque/PO number. If possible, stick to a mail order com-

expirely a more second to the property of the property of the property of the property of the best seeing software and possibly to specify and the machine, so you can that up with a more sold with the machine will burn up sold with the machine will burn up sold with the machine will burn up of the individual components first the saving process of the found on offer in the specialst comtoned to make the process of found on offer in the specialst common source will be found to offer in the specialst common source will be found to offer in the specialst common source will be found to offer in the specialst common source will be found to offer in the specialst common source will be found to found foun Again, before you pay, check what you're getting for your money, and even if you're buying from your best friend, it would be no bad thing to out down in writing what you'll pay for what Remember that you run the same risks buying second hand computers as second hand cars:

Setting up

Apart from the computer itself, there will be plenty of other items you need to buy in order to get your system up and running. These can all too easily be forgotten in the excitement of buying the computer, so go through this checklist now - you don't want to spend all Christmas waiting for the shops to open before you can load up your favourite

• Plugs: most micros don't come complete with them. Nor do disk drives, tape decks, monitors.

· Fuses: check that the plug has the right fuse in it (normally 3 amp) before you get it home. · Leads: yes, the micro may well

you need to buy it separately? · Adaptor/trailling socket: if the number of plugs needed comes to your power points can cope? An adaptor will almost certainly be with three or four plug sockets on Murphy's Law of computing which states that a micro will always use more power sockets than you

. Y splitter: joly handy if you're vision. A Y splitter is a box which fits and will take both the TV input lead and the computer lead. You can then switch between one and the other fairly easily, rather than fumhalf an hour when you want to

## Where to set up

watch EastEnders.

puter desks are for the unbearably affluent only. Basically, don't set the a window (you won't get to see much if you do). Remember that cables between keyboards/monitors/tape decks/disk drives are usually too short to be more than six inches away from each other, and that if the keyboard ends up sitting ideal sleeping spot. Don't spill coffee (or indeed, anything stronger) over any of the units, particularly not the keyboard. Don't wave magnets

near your disks or the drive, and if

Recommended Retail

310M no monitor)

310M mono)

310M colour

305 mono monitor £859.10

you smoke, don't drop ash over any

### Categories

We've tried to include details of all the market divided into particular categories.

· Memory: this refers to the total amount of Random Access Memory (RAM) not the amount left free to

· Packaging: it's worth checking the details here against the price. A micro that appears expensive may come ready packaged with a moni-

tor, tape deck or disk drive . Disks: does the machine use disk drive built-in or external? Are software available on disk?

· RRP: all recommended retail

· Display: many home/games micros are easily hooked up to a convenient and least expensive ontion However, all computers (except the games consoles) can be you plan to use the family TV. · Graphics: Resolution indicates

the quality of screen display possi-

ble (the higher the figures the betterl:Palette size refers to the total number of colours available on the machine; Colours to the number that can be used on screen at any ularly useful for games) rather than

· Sound: tells you what kind of chip the computer uses to produce sound, what the speaker quality is like, and whether it can be used with the MIDI standard for linking computers and musical instruments

· Hardware: lets you know what the keyboard is like - can you use it for serious purposes?; tells you if it's possible to use a joystick or a mouse; and lists the ports in to which expansion devices can be

· Software: gives you the lowdown on the amount and quality of software available for the machine at the moment in the various categories, and also makes a prediction

· Buying tips: guidelines on what they might be picked up. Plus information on your rights under guarantee and what to do if the machine breaks down (God forbid!)

# **Hardware**

# Acom Archimedes

Models: Archimedes 305

Package: Keyboard. mouse and drive: keyboard (colour or mono): 310M - M denotes inclusion of PC

Memory:305 1Mb

Processor:

**Disks** 

£946.50

£958.00

£1188.00

# Performance Graphics

**Sound** 

· Performance 6 octaves, one inter-

# In brief...

cutting edge of micro techsoftware base of longer-

Hardware KEYBOARD: 103 keys, programmable Models: Master 128 Master Compact

Package 128 - keyboard plus monitor Compact - available in four

at any

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jou if

there

packages: (1) Complete system including keyboard (with integral

disk drive), monitor and print-(2) Keyboard/drive only

(3) Keyboard/drive plus (4) Keyboard/drive plus colour monitor.

Memory: 64K main RAM 64K sideways RAM

Processor: 65C12 (6502 compatible)

Recommended Retail Price Compact

Entry system £399.85 Colour system with printer £1084.45

Disks

auto-repeat rate. Keyboard has surprisingly cheap feel given quality of

JOYSTICK/MOUSE: 3 button mouse

PORTS: RS 423 serial @ Centronics

Performance

**■** Graphics

Mode 7 is a "teletext" text and

block graphics mode. Modes 3

Scrolling Monitor output Monitor supplied Compact, ves (see Package above) Monitor optionsAcorn

Spaghetti factor

Sound

Stereo output MIDI third party interfaces available

socket @ 3.5mm stereo lack @ 64 way

Software

EXISTING BASE: One game (Zarch).

IN RESIDENCE ARREST TAXABLE TA

= -



Performance good

Hardware KEYBOARD: 64 keys plus 10 fund

JOYSTICK/MOUSE: Non-Atari stan-

In brief...

Master series intended as tools, with these two machines at the "homey end of the range recommended as main use, as leisure software is not always converted to BBC format.

128 - 2 enhanced Acorn cartridge

couple of databases (from Minerva

CURRENT RELEASES: See above GAMES: One arcade title (ACE Rated

rently a couple of packages in the

MUSIC: Again, enormous potential

SOFTWARE FORMAT: Disk only PROSPECTS: Very good, but not nec-

Buylines

BEST BUY PRICE: AL RRP SECOND HAND AVAILABILITY: Not

MAINTENANCE: One year's guarant

# 50 way edge connector expansion phono socket @ Composite video @ RGB TTL @ joystick/mouse

Software

EXISTING BASE: good, but only

CURRENT RELEASES: steady flow,

Main profile is in educational/sci-

entific arena; games tend to be either BBC B games (and thus configured into 32K Ram) or bigger (not necessarily better) versions of BBC B titles GAMES: The Master arcade scene's

GRAPHICS: a few; one or two of

Cassette loading

Buylines

MAINTENANCE: Within one year's

BEST BUY PRICE: As RRP

SECOND HAND AVAILABILITY

Both machines are upwardly BBC B compatible. Compact has built-in disk drive tucked under keyboard. Distinctive BBC brown and

# **Amstrad CPC**

Models CPC 464 CPC 664. CPC 6128

Package Keyboard, monitor (mono or colour) plus built-in tane/disk\_plus software (usually 12 games), joystick, CPC 664 is no longer manufactured but may be available on special offer

from retailers in different packaging configurations Memory: 464/664 64K

6128 128K

Price	
464 mono	£199.9
464 colour	£299.9
664 unavailable	
6128 mono	£299.9
C129 colour	C200 0

# Disks

Capacity 180K formatted per side

Add-on drives Amstrad DDI-1 first for CPC464. Amstrad FD-1 or third party drives for any CPC.

Performance
 Reliable and quick

# **■ Graphics**

Resolution	Mode 1	320x200
	Mode 2	640x20
	Mode 0	160×200
Palette	27	
Colours	mode 1	
	mode 2	
	mode 0	16

Options Stick with Amstrad's own

None

# In brief...

# **■ Hardware**

KEYBOARD: 74 raised plastic keys.

JOYSTICK MOUSE: Standard 9-pin



Sound Sound chip

Performance

PORTS:CPC 464 • PCB edge RS232C interface • Centronics parallel • 6-pin Din RGB with sync luminance • sync3.5mm stereo socket • joystick • cassette port • CPC 664/6128 • PCB edge connector – takes RS232C interface

· Centronics parallel printer · Addon disk socket . Joystick . Cassette port • RGB with sync luminance sync 3.5mm stereo socket •

# **■ Software**

EXISTING BASE: Good, even if not

RELEASES: GAMES: Good, but some converted

GRAPHICS: Good selection of titles

MUSIC: Reasonable number of titles,

SOFTWARE FORMAT: 464 tape SOFTWARE LOADING: Tape

# Buylines

BEST BUY PRICE: Curry's is

SECOND HAND AVAILABILITY:

MAINTENANCE: One year's guarantee. Faulty machines return

# **Amstrad PCW**

# Disks

180K formatted per side Price of Blank Disks about \$3.00 Add-on drives

Add-on drives have been produced to take 5.25 inch disks, CPM format can be transferred to the PCW machines.

# **■** Graphics

PCW8256 PCW8512

#### Package: 8256 - keyboard, monitor

Locoscript 1 word

8512 - as 8256 above but 9512 - restyled keyboard.

disk drive, daisy wheel printer. Locoscript 2 word

Memory Processor:

Recommended Retail Price:

@ Performance Sound Sound chip

Stereo output @ Performance beeps only. Some

#### In brief... The PCW range was

designed as a word processing machine rather than a general purpose computer. Non-word processing software was produced after sales rocketed. Not recommended as a games machine

# Hardware

KEYBOARD: Includes extra keys for word processing functions. Keyboard



JOYSTICK/MOUSE Not supported

PORTS: One expansion port takes SPAGHETTI FACTOR: Low Only one plug needed. Cable from keyboard to monitor; two cables from

Disk drives are set "vertically" in monitor casing to right of screen. Short monitor to printer cable means printer must be placed to left of monitor. Monitor to keyboard cable means keyboard sits naturally 6 inches to a foot in

# **■** Software EXISTING BASE: not wide but

CURRENT RELEASES: very few.

PROSPECTS: would be poor but for launch of 9512. Revival will depend GAMES: Arcade titles are very

numerous, but again the range is available under CP/M, but outlook for

MUSIC: none - machines not SOFTWARE FORMAT: Disk only.

# Buylines

MAINTENANCE: One year's guarantee. Faulty machines return

BEST BUY PRICE: As above.

SECOND HAND AVAILABILITY:

# Apple Macintosh

Models: Macintosh SE Macintosh II

Package: Monitor with built-in cpu and disk drive.

separate keyboard Memory:

Motorola 68000 Motorola 68020

Recommended Retail Price £2,294,25 upwards £4 329 75 upwards

**Disks** 

Format Capacity

3.5nch

800K

Graphics Besolution SE

black, white and grey shades

Colours with colour monitor - 16 to 256

Monitor output Monitor supplied

Sound Sound chip

Apple (ASC) Stereo output

MIDI Third party interfaces available. **Hardware** 

KEYBOARD: Supplied 81 keys

JOYSTICK/MOUSE: Joystick not

SE 2; Apple Desktop Bus connector @ 2

**■ Software** 

EXISTING BASE: Wide range of software exists in virtually all fields CURRENT RELEASES: adequate: largely of US origin and in the business or DTP field

GAMES: very few arcade games, but

GRAPHICS: lots of interesting software for those involved in DIY publishing MUSIC: Very well supported for MIDI software - but it's expensive stuff SOFTWARE FORMAT: All software

SOFTWARE LOADING: Quick and

PROSPECTS: Expellent, especially in

Buvlines BEST BUY PRICE There isn't much act a discounted market in Macs: you In brief...

A very expensive up-market machine for those keen on desk-top publishing, wimp systems, and up-market software. If you can afford it, great - but remember that software is very expensive. Games are Imostly imited to icon-driven adventures (little arcade action software available). Good for MIDI musicians, but be prepared to pay through the nose.

generally have to pay the list price SECOND HAND AVAILABILITY: Check small ads in specialist magazines.

MAINTENANCE: One year's guarantee



# Atari ST

#### Atari520STFM. Models: 1040STF, Mega STs

Package: 520STFM and 1040STF keyboard with built-in disk drive

Memory

520STFM 1Mb Mega ST 2 or 4Mb

Processor: Motorola 68000

Recommended Retail

Price 520STFM £299.99

Discs 360K formatted

(1/2 Mb drive) Price of Blank Disks about £3.00

# # Performance Fast and reliable

**■** Graphics high res 640x400

monochrome in high res.

Other models Monitor output RGB/monochrome Monitor supplied Options dedicated Atari monitors, in monochrome or colour. SM124 high

High resolution is only available on mono monitors; medium and low resolutions are only available

■ Sound Sound chip

Stereo output MIDI Performance 8 octaves, envelope shaping

## Hardware

KEYBOARD: 96 keys including 10 JOYSTICK/MOUSE: Joystick ports

PORTS MIDI out (5 pin DIN) @ stick ⊕ joystick ⊕ cartridge ⊕ TV

## In brief...

Excellent as a general purpose home machine for games, small business, and productivity it's also the number one choice for MIDI musicians. The ST's price could still give it the edge for artists over the Amiga.

# Software

EXISTING BASE: Though on the CURRENT RELEASES: Most major

es specialise in ST titles. PROSPECTS: Very bright indeed. Could soon rival Spectrum and C64 GAMES: Range of arcade titles isn't

GRAPHICS: Impressive, with several

MUSIC: excellent. Many companies

SOFTWARE FORMAT: Disk only SOFTWARE LOADING: A 360K

changing these require can get

# Buylines

BEST BUY PRICE: You won't get

SECOND HAND AVAILABILITY: Yes, look in classified ads of maga-

The ST is an attractive looking machine with slanted function keys above similarly styled slats. it was one of the first machines to include a disk drive in the side of the console - this design is now also taken up by other manufac-

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your Skill at becoming Scotlands best gamesplayer. The company with the high scoring joysticks EUROMAX will be there displaying their range of joysticks and controllers and giving out prizes to the sharp shooters. Top six scores of the day win the goodies. If you are

not so hot on the joystick come along anyway you could win one of twenty spot prizes of software for your computer just for being there. Enter the Quiz Competition, test your knowledge and win a prize. We'll see you there on Saturday the 12th and Sunday the 13th, of December

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# Atari XL/XE

Models: (no longer manufactured) Atari 65XE Atari 130XF

Package: 800XL retailers' own - look for keyboard, plus tape deck,

iovstick and software 65XE Atari Starter Pack includes keyboard, tape deck. joystick, software (10 games)

130XE Atari Starter Pack

Most titles available on disk

Disks

Format

**■** Graphics

Monitor output Monitor supplied

joystick, software (5 games) Memory:

64K 128K

Processor: 6502 Recommended Retail Price

Sound Sound chip

Not supplied. Third party Performance

Hardware KEYBOARD: 62 keys including some JOYSTICK MOUSE Standard joystick

PORTS: Rom slot @ 2 joystick @ edge

In brief...

Once the choice of the dedicated arcade games player these machines pioneered sound. In their later configu rations they remain attractive purchases for the wealth of existing software, but support is fading very rapidly and the outlook is grim.

Software EXISTING BASE: Good but long in the CURRENT RELEASES: Thin on the

GAMES: Arcade range is of high quality.

GRAPHICS: Some good programs on SOFTWARE FORMAT: tape or disk. Disks are quick, but tape software can

MUSIC: Well supported in this area

PROSPECTS: Not brilliant now that

Buylines

800XL shop around - machines are now 65XE Dixons is offering the Starter Pack 130XE generally as RRP

SECOND HAND AVAILABILITY: Quite

MAINTENANCE: One year's guarantee





# Commodore Amiga

Amiga 500 Models:

Package: keyboard, with built-in disk drive. A1000 is discontinued, so packaging will depend on different dealer policies.

Memory:

A500 512K A1000 256K A2000 1024K

Processor: Motorola 68000

Recommended Retail Price A500 6499 99 A1000 none - discontinued £1236.25

Disks

880K formatted Software Extra drives

Noisy and surprisingly sluggish

**■** Graphics Palette

4096 in hold and modify

available for A500 only at £24.99 Monitor supplied

Vertical, horizontal Scrolling Very fast with right software raphics co-processor allows sprites to be 're-used' under some circum stances and offers powerful windowing capabilities, while block image transferrer (blitter) speeds up large-scale graphics work enormously.

**■ Sound** Sound chip Commodore custom chip

MIDI Channels © Performance Built-in text to speech synthesis, 9 amplitude and frequency modulation

Hardware

JOYSTICK MOUSE Mouse supplied as

PORTS: Two joystick/mouse @ Audio RGB video @ Monochrome video @

Software EXISTING BASE: Small in comparison

CURRENT RELEASES: Beginning to

GAMES: Arcade products not yet up to

GRAPHICS: Quality and range outstand-

MUSIC: Potentially superb. Little MIDI

SOFTWARE FORMAT: Disk only

SOFTWARE LOADING: A noisy process PROSPECTS: Good, but A500 needs to

Buylines BEST BUY: Not at present sold below RRP, although it can be worth checking

SECOND HAND AVAILABILITY:

MAINTENANCE: Within guarantee



In brief...

Stunning specification. Despite initial uncertainty, software support now seems assured. Although overshadowed by the ST in the UK to date, overseas sales (particularly in US) are high. An excellent machine for those who can afford one.

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# Commodore 64/128

Models: C64, 128, 128D

Package: C64 and 128 keyboard plus C2N tape recorder, plus

Memory: C64, 64K; C128, 128K; C128D, 128K

Processor: C64, 6510: 128/128D, 8502 plus Z80 for use in CP/M

Recommended Retail Price: C64; £159.99-£179.99† C128 £199.99 stand-alone; £229.99 with C2N; £249.99 with C2N + software C128D £399.99

+ according to individual dealers' packages.

# 9 Performance Commodore 1541 drive is notoriously

**Graphics** 

Two disk drives are commonly available - the C1541 and the more recent Capacity Software Most titles available on disk

Add on drives

M Disks

Note Attribute system places minor limita-tions on number of colours displayable in 128/128D RG8 for 80 column display Monitor supplied

Sound

Sound chip 8581 sound interface chip Speaker quality

Hardware KEYBOARD: Raised plastic keys with

JOYSTICK MOUSE: Provision for two

### In brief...

The 64 isan excellent games machine. The 128 and 128D can be configured for business use using the CP/M standard and giving access to a vast range of business and utility software, 64 is a particularly difficult machine to learn programming on due to outdated BASIC.

standard joysticks. Mouse not supplied

PORTS: 2 joystick @ expansion @ cas sette @ non-standard serial @ composite video (C84) RGB (128+128D) @ TV @



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# **Software** EXISTING BASE: Excellent Only rivalled by the Spectrum but in many

CURRENT RELEASES: Still pouring out. GAMES: Arcade action second to none

GRAPHICS: Good selection - quality of

SOFTWARE FORMAT: C64/128 - tage

tape-based software. Some third party interfaces are available to enable a normal

Disks

some very new models use 3.5 inch

IBM & compatibles

Mostly 5.25 inch

SOFTWARE LOADING: Slow as always

PROSPECTS: Supply will eventually 4

# **Buylines**

des", it's a case of picking the one you

SECOND HAND AVAILABILITY: Good

MAINTENANCE: Under guarantee

Well under £1.00 for 5.25

Capacity: Almost always 360K formatted Software: All on disk

# Built-in

Reliable and pretty fast; hard disks, of

# **■** Graphics

Graphics are not provided as standard on PC machines, although nowadays necessary add-on boards already installed. There are three common

CGA (Colour Graphics Adaptor)

Colours 4 in low res, mono in high res

EGA (Enhanced Graphics Adaptor)

Normally fitted as upgrade to basic machine, but comes as standard on some PCs (eg Amstrad PC1640).

720x348 Often built-in on mono PCs

These are the three most common dis play standards, accounting between them for almost all cheap PCs current ly in production, but other adaptors do exist. Buying second hand you may well encounter machines with unusual or text-only displays.

Display Monitor output Normally RGB Monitor supplied With most packages Dedicated monitors are

**Sound** Sound chip None as such – need direct speaker modulation

Goel Computer Services

The Complete Computer Store 45 ROSTON ROAD, HANWELL LONDON W7 3SH, TELEPHONE: 01 579 8133

Palette

Colours

45, 50	,510	14 110	no, i	MITTILLE, LOITE	DOIL	** 1 3	311 1	LLLLIONL	. 01	313	0133	
TITLE	ST	AMIGA	PRICE	TITLE	ST	AMIGA	PRICE	TITLE		ST	AMIGA	PRICE
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Terrorpods	24.95		17.50	Gnome Ranger	14.95	14.95	11.00	Trivial Pursuit		19.95		14.00
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Pirates of Barbary Coast	12.95		9.00	Tai Pan	19.95		14.00	Leviathan			19.99	14.00
Impact	14.95	14,95	11.00	Strike Force Harrier	24.95		21.50	Q Ball			19.99	14.00
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Indiana Jones	19.99		14.00	3D Galax	19.99		14.00	Annals of Rome		19.95		14.00
Ogre	24.95	24.95	17.50	Battleships	14.99		11.00	Bubble Bobble		19.95		14.00
Addictaball	14.95		11.00	Battleships		19.99	14.00	Black Lamp		19.95		14.00
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Model: IBM's PC is the original. The many clones include series, Tandy's 1000EX Spectrum Bondwell 32, etc. The specifications given below will generally apply to most IBM compatibles unless particular riders are made. If you are thinking of buying a PC or

compatible check all the salient details with dealers Package: Depends on manufacturer. Amstrad supply a machine with monitor, with or

without hard disk. You can buy

the bare bones or the whole

Memory: usually 512K-640K

Processor: Intel 8086, 8088

Recommended Retail Price

From around £400.00 for the

cheaper basic clones to £1500

for top-of-the-range clones (with hard disk, colour monitor

etc.) IBM machines them-

KEYBOARD: All models use raised plastic keys with audible tactile feedback JOYSTICK MOUSE: Two different low

Hardware

stick standards exist. IBM (analogue) and

PORTS: Varies. Expect Centronics par

**■ Software** 

**EXISTING BASE: Vast** CURRENT RELEASES: Still pouring out

GAMES: Chesper machines has meant

### In brief...

Superb value if you want an all-round machine, but the PC still betrays its business origins. Increasing number of games software releases. but few of these are of the coin-op arcade variety. Definitely not to be considered if entertainment is your

MUSIC: Fair selection of MIDI packages

PROSPECTS: Won't dwindle as long as

# Buvlines

BEST BUY PRICE: All-in-one packages

SECOND HAND AVAILABILITY: PCs can often be picked up in auctions of

MAINTENANCE: Return to dealer if surprisingly cheap - can guarantee your

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26.00

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# MSX

# Disks Format: mostly 3.5 inch, a few 5.25

inch drives produced
Capacity 350% formatted (3.5")
Software mostly available on disk
Price of Blank Disks about 23.00
Add-on drives
yes
Pulls in

Built-in no e Performance reasonable. MSX disk-drive units tend however to be very expensive.

# Graphics Resolution 256x Palette MSX 1

	MSX 2	25
Colours	MSX 1	
	MSX 2	
Display		
TV	ves.	
Monitor outp	out composit	e video
Monitor opt	ions Some n	nanufact.
ers produced	dedicated m	odels.

Sound

Sound chip AY-3-8910 Speaker quality output through TV Stereo output can be connected to external hi-fi system MIDI third party interfaces available

MIDI third party interfaces available Channels 3 Performance good Yamaha'

# In brief...

Main strength of MSX is in its implementation of arcade games. There is a very active user group that partially compensates for lack of industry support. Despite the attractive discounting of some models, the purchase of an MSX machine involves a high degree of risk with regard

Hardware

KEYBOARD: Generally standard

to future support and soft-

ware releases.

JOYSTICK/MOUSE: Standard joystick cort. Third party mice available.

tick port. Third party mice available.

PORTS: Expansion bus @ cartridge like is monitor output iii. RF TV iii.

# ■ Software

EXISTING BASE: reasonable, twith a number of Japanese cartridges available. Stockists now very hard to

CURRENT RELEASES: very lew Mostly budget or imported.

no shortage of software worldwide, not all UK software houses include MSX in their plans. GAMES: some good arcade titles

well-implemented, but adventures are few and far between.

GRAPHICS: not much on the market

MUSIC: Yamaha's now discontinued CX5 was configured for musical applications: thus there are a number of packages available

SOFTWARE FORMAT: tape, disk or pre-programmed games cartridge with tape, predominant.

# Buylines MAINTENANCE: One year's guarantee. Return to dealer if faulty

BEST BUY PRICE: MSX 1 can be picked up for as little as £20.00 these days. MSX 2 is scarce, but should cost between £100-£200.

SECOND HAND AVAILABILITY: Check small add in computer press MSX is not a computer as such, but a standard design incorporated into a number of computers manufactured by a number of (mostly) Japanese

MSX 1, launched 1985,

no longer manufactured, some models still available at knock-down prices. MSX 2 is current version but machines not widely available in UK.

Package: Generally keyboard only. Some MSX 1 models can be found with tape deck and software

Memory: MSX 1 - 32K-64K; MSX 2 - 128K

Processor: Zilog Z80

Price None for MSX1, MSX2 - £150 plus.

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# Sinclair Spectrum

Models: Plus (48K and 128K): Plus 2 Plus 3

enerally fast and reliable. Some hith erlo unforeseen compatibility prob lems may arise with commercial soft ware - but they haven't surfaced yet.

Package: Keyboard and built-in tape/disk plus joystick, selection of software.

48K or 128K 128K 128K

Processor

Recommended Retail Price

Plus 2 **Disks** 

@ Performance

Memory:

(Plus 3 only) Capacity 180K formatted per side Graphics

Only 2 colours can be used within any 8x8 pixel square. Limits graphics

Scrolling Despite clever programming, the Spectrum's display still compares unfavourably with both the Amstrad

■ Sound AY-3-8912

Speaker quality No Plus 2/3/128K

Performance Poor - sound has never been the Spectrum's strong point, and few

### In brief...

The Spectrum is primarily a games machine and should be bought only as such. It is unsuitable for business use with low memory capacity and only a 32 column screen display. For productivity (ie. graphics and music type applications) use, it is not really sophisticated enough for serious projects. Utilities fair but serious users will want to upgrade before too

spectrum software titles make much

Hardware

KEYBOARD: The Spectrum Plus key boards are made of hard plastic set into raised hard plastic keys. Unlike the older model, it can be used more easily for

JOYSTICK MOUSE: Non-standard on all models. Suitable interrlaces widely avail-2 and 3 packaging. Third party mice

onitor @ Audio @ Numeric keypad @

Software EXISTING BASE: Second to none

CURRENT RELEASES: Most major soft

GAMES: A huge number of arcade tides GRAPHICS: Fair selection, some of

MUSIC: A couple of MIDI interfaces

SOFTWARE FORMAT: Plus - tape using external tape deck: Plus 2 - tape using built-in tape deck: Plus 3 - tape (using external recorder, not supplied)

PROSPECTS: New releases will undoubtedly get fewer in number as the

Buvlines BEST BUY PRICE Plus can now be

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tock at around £50. Curry's is offering

SECOND HAND AVAILABILITY: Good. NB: The original Sinclair 48K model can still be found second-hand. If you're only interested in playing games and don't mind the rubbery keyboard, it could represent a good investment. Ensure that you get the 48K model - there is no outward way of distinguishing it from the leven earlier) 16X models, which are quite useless for running contemporary software.

MAINTENANCE: All Amstrad-badged Spectrums have a year's guarantee. If

## Disks Not available.

**■** Graphics

Resolution Palette Display Monitor options **■ Sound** 

s Performance Good sound effects or

In brief...

Japanese software base not as good as Nintendo's, but what counts is how many titles reach UK. Mastertronic have given strong support to machine, so prospects are reasonable.

Models

Atari 2600 Atari XE Video Game Console Atari XF Games System

2600: console plus software XF GS: console, software

Recommended Retail

2600 XE GC £119.99

# Hardware

PORTS: 2 game controllers & car-Robust casing. Not designed for future expansion. Not a true computer; recommended as games console only.

**■ Software** EXISTING BASE:

CURRENT RELEASES: well-sup-ported by UK distributor Mastertronic

PROSPECTS: good if support by Tronic and parent company Sega GAMES: wide selection of arcade titles, generally considered to be of high quality. No adventures. Bulk of releases currently confined to con-

GRAPHICS MUSIC:

Buylines BEST BUY PRICE: As RRF

One year's guarantee. Back to dealer if faulty.

# Atari consoles

Disks XF only see Atan XI, for details

**■** Graphics Resolution officially 320x192, 160x90 or

Hardware KEYBOARD: Only as an extra on the XE

JOYSTICK MOUSE: All machines take

Package

XE GS: console, joystick, additional keyboard, light gun, software (3 games)

PORTS: 2600 game controller, TV, cartridge slot @ VGC as 2600, with socket

Software EXISTING BASE: Vast. Systems are

CURRENT RELEASES: Software is still

GAMES: Excellent arcade games

In brief...

The Atari range of consoles represents good value in terms of price and volume of software available. But note that the 2600 is strictly a games console while the VGC and VGS can both be upgraded to be used as computers.

GRAPHICS: very few

MUSIC: Hardly any SOFTWARE FORMAT: VCS - cantidge only. VGC and VGS can use critidge. tape, or disk (if connected)

PROSPECTS: Not much better than

Buylines BEST BUY PRICE:2600 check out

SECOND HAND AVAILABLITY: Good:

MAINTENANCE: Manufacturers' guaran-

# **Nintendo**

Nintendo Entertainment System

Package:

Standard version console, plus game controllers, plus 1 game (Super Mario

Deluxe version - console. game controller, light gun, ROB robot, two games

Recommended Retail Price

699 Standard model £159

## Disks

A disk system is available in Japan, using

#### **Graphics** Display

Monitor options

# **Sound**

s Performance includes speech syn

**Hardware** Ports: @ RF TV. video @ audio ! game controller slots @ cartridge slot

MAINTENANCE: Manufacturer's

Additions of light gun and robot make this a suitable machine for puter; recommended as games

#### **Software** EXISTING BASE: Huge (in Japan)

CURRENT RELEASES: PROSPECTS: Good but rate of

ularity in UK. Because of the Yen to Pound conversion rate, Japanese software is likely to remain expen-

GAMES: good range of arcade-type software. Some arcade adventures.

MUSIC: SOFTWARE FORMAT:

not yet available in UK

#### Buylines BEST BUY PRICE: As RRF SECOND HAND: Not as yet

MAINTENANCE: Manufacturers

In brief... A reasonable buy if a con-

sole is what you want. Interesting, too, because we may see more add-ons from Japan that give it extra power. However, at the moment, nearly all software is Japanes in origin and this is not to everyone's taste. It. remains to be seen if it will receive any third-party sup-

Package: console, plus light gun, game controller and 1 game (Hang On)

Software formal cassette cartridge smart card

Recommended Retail Price

136 Advanced Computer Entertainment

# SOFTWARE BUYERS GUIDE

There's not much point in buying a computer without getting some software to run on it. And since this is the festive season we're presenting you with our selection of 50 games that should keep you warm with excitement this winter.

There's something here for everybody, from the megalomaniacal strategy of Balance of Power to the sheer arcade playability of Bubble Bobble.

Have fun!

#### AIRBALL

Microdeal ● Atan ST ● £24.95ck
Multi-coloured three dimensional arcade
adverture that owes semething to the
Ultimate style but is years ahead in terms
of graphic detail and presentation. You,
as the airbail in question, must negosiate
corridors and nooms full of various detailcies — all spelling instant death. An outstanding rendton of a popular gene.

#### ARKANOID

Irragine ● Spectrum £7.95cs ● C64 £8.95cs, £12.95dk ● Amstrad £8.95cs, £14.95dk ● Atari XUXE £8.95cs ● Atari \$7.514.95dk ● MSX £8.95cs ● IBM PC £19.95dk

Conversion from Arkanoid the coin-op, in its turn the best version of the classic Breakout Simple in concept: the player controls a bat at the base of the screen, whizzing it left and right. The object is to keep a small ball in play, bouncing it off



the bat to destrey formations of bricks in the top half of the screen. Eliminate all the bricks and move on to the need of 33 screens. Cleiver eiths features confributo the addictiveness. As a lathitu cein-op conversion, Arkanoid comes out top, but for a different start on the same theme and some nifty music, try ASL's impact, which also builds up the difficulty levels more gradually.

# BALANCE OF POWER



#### BALANCE OF POWER

Mindscape Wirrorsoft ◆ Amiga £26,95dk ◆ Atari ST £26,95dk ◆ IBM PC £26,95dk ◆ Mac £26,95dk

Definitive strategy game for 16-bittes. The player takes the role of one of the superpowers, while either the computer or a friend takes the other. Then it's a case of trying to win triends and influence people on a global scale. This can be achieved in a number of ways, including supplying arms or financial aid to radical factions in the hope of sopping a power-meet which is not receptive to the great American or Russian dream (depending on which side you're playing). It's complex, involving and its official to play in an immune sessions. Absorbing stuff that gives an insight into the devious world of

## BOULDERDASH

Prism Leisure Corporation ● Spectrum £2.99cs ● C64 £2.99cs ● Amstrad £2.99cs

A game that has everything — instant addiction, beginner challings, heart challengs, heart challengs, heart challengs, heart challengs, heart and excitement as the clock licks glews and extending through puzzles. You must be challengs which and budders to get all many award and budders to get all challengs, while ne piecels are other done by seemingly imperentable was change, while ne piecels are other done by seemingly imperentable was a classic you can't allord to miss in its budget incumation.

# BOUNDER

Gremlin Graphics ● Spectrum £7.95cs ●
C64 £9.95cs £12.95dk ● Amstrad
£8.95cs £13.95dk ●

A great attade bounce-em-up, and very addictive too. You guide a ball as it bounces from one platform to another, high above the vertically scrolling landscape. Land on marked squares and you can stay slift longer or gain a mystery borus. Fill in a gap or hit one of the game's many nasties, however, and



you'll lose a life. Bonus bouncing sections at the end of each level help vary the pace, and those tough gaps really keep you coming back for more. Bright with graphics, great music — and it's soclossibile.

#### BUBBLE BOBBLE Firebird ● Spectrum (7.95cs ● C64 £8.95cs €12.95dk ● Amstrad £8.95cs £14.95dk ● Atan ST £19.95dk

Playability is the essence of this two player coin-op conversion. You and friend play butble-blowing discausitravelling through 100 mape-and-platfor screens, fighting off the "bullies" is encapsulating them in your bubbles is

# BYTEBACK

SPECIALIST BEST PRICES FASTEST DELIVERY! 13.95 Feud Firepower ... 16.95 Leviathon Space Ranger .6.95 Ninja Mission 6.95 Dr. Fruit . 16.95 Marble Madness . Archon I & II (2 pack) .... Goldrunner ..... 16.95 Starglider Swooper 13.95 Amiga Karate 16.95 Terrorpods ... Flight Simulator 2 34.95 Silent Service 16.95 Leaderboard Bards Tale .... 16.95 Faery Tale .... 20.95 Sinbad 20.95 Seven Cities of Gold Deja Vu. 20.95 Balance of Power 20.95 The Pawn ..... 16.95 Mindshadow Tass Times in Tone Town Portal . 24.95 Hacker ..... 20.95 Moonmist 20.95 Leather Goddesses

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and various bonuses awat as you reach, the more difficult later screens. Enormously good fun, if a little on the cutesy side. Can also be played as one player against the computer.

# CHESS MASTER

Electronic Arts © C64 £9.95cs £14.95dx® Amiga £24.95dx © Atan ST £24.95dx © IBM PC £24.95dx

Strongest chess game on the Am with excellent graphics, 20 or 30 in point, 12 levels of difficulty and all playing options you could wish for. If some tarrly nifty speech synthesis.



# COLOSSUS CHESS 4 CDS • Spectrum 29.95cs• C84 19.95cs CDA 9564 • Americal 59.05cs C14.95cs

 Atan XLXE E9 95cs £14,95dx
 Best bet for 8-bit machine owners, with choice of 2D or 3D view, umpteen levels of difficulty, and myriad options which enable you to play, watch, work out chess problems, etc against a fine comouter occompater.



#### DECATHLON Finibird ◆ Spectrum ◆ £1.99cs ◆ C64 £1.99cs ◆ Amstrad £1.99cs

Exhausting but exhitarating. Decathlor is the supreme joystick-waggling test as you run, jump and throw your way to a gold medal and world records. Two-play-

## ELITE

Firebird 

Spectrum E14.95cs 

C64

£14.95cs £17.95dk 

Americal £12.95cs

£14.95dk 

BBC £12.95cs £14.95dk

[available from Superior Software]

till the best space trading game. Either a standard for other companies to toltile. One of the first space games to use inclor graphics. It's a shooting and trading effort set across several gataxies with plenty of variety to the gameplay You can trade legal goods in (relatively sale systems, or run the gaurdlet or purates in the galaxies' diagnet soots with your hold full of contratand. Either way there's a nicre line in zero-G dopfgrafting and as big a task, as you'll find anywhere.



# EXOLON Hewson • Spectrum £7.95cs • C64

£8.95cs £12.95dk ● Amstrad £8.95cs £14.95dk

urapricely superb nonzontally scroling shoot-em-up in which you run, duck and jump your way along a planet's surface blasting away at alen defences. A gun and a misselle launcher are used to blast the foes, but if things are still too tough then you can grab an exceleration for

#### FLIGHT SIMULATOR 2 Sub-Logic ● Atan ST £49,95dk ● Amiga £49,95d ● IBM PC £49,95dk



The venerable godfather of light simulasons. Flight Sim II is the standard by which all others are judged. Although it spent a zillion weeks on top of the US charts, it's difficult to get hold of in the UK. If you have the technology, this is an essernial purchase.

# HEAD OVER HEELS Oosan ● Spectrum £7.95cs ● C64 £8.95cs £12.95dk● Arristrad £8.95cs £14.95dk ● MSX £8.95cs ● IBM PC

80 exploration reaches its peak with this upper intricate masterpiece. You play the characters — Head and Heels — as you learn for the crowns that will tree the palkay. The puzzles can get very difficult indeed, and you'll other have to split feed and Heelb up to use their different feed and Heelb up to use their different papabities. The game's 300 locations are withly drawn, and the animation is excellent throughout. A real classic.

HIGHWAY **ENCOUNTER** 

lable on The Best of 3D compilation from US Gold) . Spectrum CR GOos & Ametrad CR GGos

Each game in this compilation is an excellent example of Vortex's 3D animation and tough gameplay, but Highway Encounter stands out in both departhighway fighting off threats from a mutant



I, BALL

bird Spectrum £1.99cs C64

A vertically scrolling shoot-em-up in which your mission is to rescue your pals who have been kidnapped by than embodiment of evil. Terry Ball. As a ball yourself, armed with a small front-firing tough but there are loads of extra weapons you can pick up on the way to help, such as smart bombs or the awesome Rainbow Ripple laser, which as

INFOGRAMES'

Infogrames • Amstrad £12.95cs £15.95dk • MSX £12.95cs

simulations, with large playing cards depicted against a suitably green baize background. Plays a good game (for a computer, which after all is a bit short in and features a wide range of options and bidding conventions which you can toggle on and off according to your style



KNIGHT LORE ichet • Spectrum • £1.99cs • Amstrad £1.99cs ● BBC £1.99cs

Classic mouldbreaker from Ultimate that set the standard for 3D games for years graphics on the Spectrum to avoid attribute clash (it's more colourful on al puzzles and a mammoth quest. The



and at a budget price, you have no

LAST NINJA System 3 ● Spectrum £9.99cs ● C64 £9.99cs £14.99dk ● Amstrad £9.99cs £14.99dk • Atari ST £19.99dk



graphics combine with complex manoeuvies to produce top quality kicks and punches against a wide variety of opponents met on your travels through the

#### LEADERBOARD Access/US Gold ● Spectrum £8.99 ● £9.99cs £14.99dk● Amstrad

£9.99cs £14.99dk ● Atari ST £19.99dk If you only buy one golf simulation for board It's head and shoulders above everything else on the playability and realism stakes, easy to get into, delightful graphics, and some wicked courses. Once you've mastered the courses on Leaderboard and then World Class our Atari ST specialist

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#### LIGHTFORCE L ● Spectrum £7.95cs ● C64 £8 95cs

£13.96dk ● Amstrad £8.96cs £13.96dk can easily become a habit.

#### LORDS OF MIDNIGHT Beyond • Spectrum £9.95 cs • C64

adventure. The best way to play the and play as one epic. The wargame



#### MAGIC KNIGHT TRILOGY Mastertronic . Knight tyme Spectrum

£2.99 rs Amstrad £2.99rs @ Spellbound C64 £2.99 cs ● Stormbringer Spectrum

This trilogy is a series of menu-driver arcade adventures which, as well as all a complex system of interaction between characters. In Spellbound you must res-



have to find a way back in time after being cataputed into the 25th century. while in Stormbringer, the final part, we find that the magic knight has been split in two, one part good, the other evil. You can't kill yourself, so the only solution is to merge the two halves. But how? Lots of action, plenty of thought and good

#### MARSPORT iargoyle Games . Spectrum £9.95cs

Take the part of Commander John Marsh. Earth's last hope in the struggleagainst the Sept in this arcade adventure to zap. The 3D animation is great as the mous space station where the game is

# MATCH DAY Ocean • Spectrum £7.95cs • C64

£8.95cs £13.95dk Definitely the football game on micros: horizon, however - Match Day 2 is soon due for release on Commodore and

### MERCENARY Novagen ● C64 £9.95cs £12.95dk ● Amstrad £9.95cs £19.95dk

Fly around a city of strange buildings and

explore the maze of underground passages all presented to you in fast. Join forces with either of the warring Paliars or Mechanoids or play them off

#### PITSTOP 2

Epyx/US Gold . Available only on Epyx Foics compilation • C64 £9.95cs £14.95dk • IBM PC £29.95dk (in compi-

Super Base

£10.95

is split into two and you can race the computer or a friend. Lots of different

### POWERPLAY a ● Amstrad £8.95cs £14.95dk ●

edge, we reckon you'd be better off with admittedly monster-selling Trivial Pursuit



een split

olution is

Sics .

0 064

5d. **e** 

en of

Thalamus ● C64 £9.99cs £14.99dk you must steer a metallic ball through ten different screens of mazes, bonuses and obstacles, all within a set time limit. This simple game concept has a host of added gameplay features which make it unused time to the next screen, so take of time to tackle the more fiendish ones: or 'planes' in any order you wish. Excellent graphics and the play is uttenly

# **REVS PLUS** C64 £9.95cs £12.95dk ● BBC £12.95cs

stone, Snetterton, Nurburgring, Doning





ton Park and Outon Park. Feetures high which adds to the realism of the game negotiating the coiners, particularly the

# SCRABBLE

eisure Genius 

Spectrum (9.95cs C64 £12.95cs £14.95dk • Amstrad £9.95cs £14.95dk ● IBM PC £24.95dk The hugely popular word game translat-



# SENTINEL

insbird . Spectrum £9.95cs . C64 £9.95cs £14.95d ● Amstrad £9.95cs £14.95dk . Atari ST £19.95dk Bizarre and compelling strategy game

trigger finger are both necessary in this landscapes - game.

# SHADOWFIRE

Beyond • Spectrum £9.95 • C84 \$9.95cs £11.95dk • Amstrad £9.95cs

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menus that can be called up. They have different characteristics, and their individual talents must be exploited in order to survive. Played against a very tough time limit, Shadowfire requires the player to react swiftly under pressure and stretches tactical abilities to the full

#### SHANGHAI rision C64 £9.99cs £14.99dk ● Atan ST £19 99dk • Amiga £24.99dk • IBM



Thoroughly addictive patience-style game played with representations of Mah-Jongg tiles. The 144 pieces are stacked in a rough ovramid shape, and the player must remove exact matching pairs of those tiles which are free, in which can be taken from the pyramid without dislodging any other tiles. The object is to remove all tiles. Optional features include two player, tournament and time limits. All versions are extremely playable, but the stunning graphics on the Amiga version ensure that it will get loaded up again and again.

# SKULLDIGGERY

Soulderdash -clone that completely outdoes the original on this particular machine. Again (see Boulderdash. above) you're digging for diamonds in a time limit for each screen. Skulldiggery begin with and a choice of starting point

### SORCERY

Virgin ● Amstrad £8.95cs ● C64 £8.95cs As near to graphic perfection as you're



slouch on the gameplay side either. As a sorperor on the side of good you have to fly round the landscape - dungeons, waterfalls, castle battlements, etc - freeing your imprisoned companions. Scat tered around you'll find weapons to dispose of nasties and keys to help you explore further, but you'll have to plan their use carefully. Good to listen and

#### SPINDIZZY Electric Dreams ● Spectrum £9.99cs ● C64 £9.99cs £14.99dk ● Amstrad

Tremendous stuff; steer your spinning top over tough obstacles and collect jowels, against a fiendish time limit. The game landscape is a vast system of catwalks, ramps, towers, and trampolines surrounded by lethal drops - and NO safety rails. There are floor switches to them in the right order can be harder nice touches, but the exploration's the



# Beyond ● Spectrum £9.95cs ● C64 £9.95cs £14.95dk • Amstrad £9.95cs

It's the spies from MAD magazine up to their old tricks. The action takes place in an embassy where the spies compete to find a variety of objects, put them in a bag and escape in an airplane. Each spy has a variety of traps he can set in order to delay the other's progress, but be

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shoot-em-ups; blast the dreadnought and dreadnoughts and the smoothest not to be missed, especially now that C64 versions come packages with the

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which you become the wizball and Controlling the wizball is great fun and makes this one of the most playable game to have appeared for a long time





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player controlling two shields, and collecting masks through 15 mazes, which increase in complexity as you progress. in wait, often blocking the masks and just waiting to fall on you and bring your crop up to conspire against you. Smooth requires planning to complete successful-

ZOIDS

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goidstar in search of the pieces of the you're to survive long enough to come

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# THE BLITTER END...

# Thanks for the melody...

Bach is probably spinning in his grave – Weshill Music have come up with a program for the Amstrad that churs out melodies in three part harmony, ad infinitum. If any of them sound promising, just hit a key and fill jot them down on your printer in rudimentary manuscript form. Then all you have to do is add a copyright notice, post if to John peel, wait for the millions to roll in, and no one will ever know.

Programmer Brian james claims to have taken over seven years to develop Matercomposer. The program composes in any key and in different styles—jug-waters, calipson and americes. "It clear programs demonstrate imachine intelligence", men Mastercomposer demonstrates machine creativity, warbles the bluth rint comes with the package, Contact Unstell Mass." Si Besch Pland. Westfill Stene. Abordisenstrive, ABS 9WH – but at E49 for the full version (E15 for a slimmed-down edition) it's not exactly comp for a song.

# Better Blitter

Jez San. author of Rainbird vector graphics hit Strapfeler, took time off from the gametis soon-loappear (but as yet untified) sequel to phone us and point out a king-sized COPS in ACE issue 3. If It appears that the Armap biller column in the Upgrade Stakes feature should have been hince the height it actually was, cyring it an altegether more impressive showing. Ok, we'll come clean on this one; thus, ever - a typographical error.

#### Blankety Blank

A handful of gamesplayers have been having



trouble with their Amstrad disks of Gauntlet. The disks in question had their Gauntlet labels stuck on rather claimsly, and on closer inspection proved to have Basidon Bond labels (as in The Adventures of...) undermeath. So did the disks have the emong game on them, you ask? No, actually, they were totally blank. Cunouser and curiouser...

#### Thanks to...

This month the ACE team take their hats off to:
Tim Moore (Liberatic: ST Solomor's Key and
many others) for a great life ST freeze-frame
utility that should come in very handy indeed; lain
surfey for some biffic photos at short notice;
Bath Computer Shack for their help with earlier
issues; and Deith Leisure of London without
whom Arcade ACE would be improssible.

#### PR problems

Many software houses hire PR companies to handle their publicity for them. And many PR companies handle more than one software house. Headlines, for instance, look after CRL and Martech – among others.

So perhaps we shouldn't be too surprised that one fine moming a press release came in telling us all about the latest CRL game — on notepaper headed Manech. Or is this just the first stage in a massive amalgamation? We'll have a better idea when we get the next press release.

Gary Lineker files in to start Gremlin's promotional push for the computer game and board game bearing his name. Gary's been goal-less so far this season for Barcelona; will this affect sales of

#### Next month

ar up the post-Xmas blues w

- CENSORSHIP could they cut game
- the complete business on GAMES
- ATORS
  - a musical bash-em-up of DRUMK/T reviews
  - an interview with the President of Jap arcade giants CAPCOM
- ERALS

   a trenchant LOOK BACK AT 87 by a major industry. Figure 1.
- industry figure PLUS all the usual reviews, news, adventures and letters.

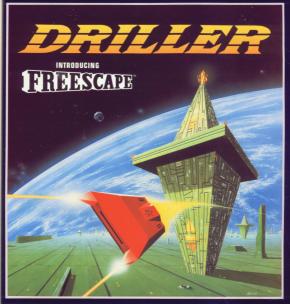
#### Funny photos

It's been furth send ACE some bizarre photos of women' month in smooth, it seems; in the red corner, some very unpleasant screenshots of disembowered women stain by the Whitechage murdeer (no names, no publicity), and in the blue corner, some lurid digitated pers of the improbably named Tins Small, sent in by a readtive or of pecular states, in a corner all of its very own however, is this one of real-flayfed ST fidness of Jacks the Ripper respiredent in her Victorian oath.



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